GB

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Quality and Innovation

ROBO CYLINDER

ROBO Cylinder
IK-P Series Catalog Extract

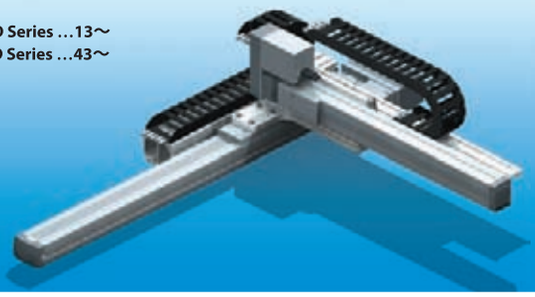
www.robocylinder.de

Wide-ranging Lineup
Lineup of IK Series

Combinations

XYB (XY, base mount)

Page
IK2-PXBD Series ...13〜
IK2-SXBD Series ...43〜



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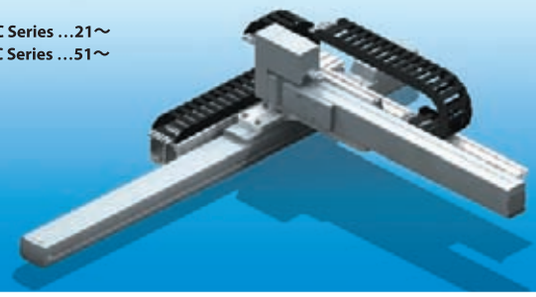
IK2-PXBC Series ...21〜
IK2-SXBC Series ...51〜



• IK2-PXBD Series • IK2-SXBD Series

		Maximum X-axis stroke	Maximum Y-axis stroke	Load capacity at maximum Y-axis stroke
Single-slider	Y high-speed type	600mm	200mm	2.5kg
	Y medium-speed type	600mm	200mm	5.0kg
Double-slider	Y high-speed type	450mm	400mm	2.0kg
	Y medium-speed type	450mm	400mm	4.0kg

• IK2-PXBC Series • IK2-SXBC Series

		Maximum X-axis stroke	Maximum Y-axis stroke	Load capacity at maximum Y-axis stroke
Single-slider	Y high-speed type	600mm	200mm	3.0kg
	Y medium-speed type	600mm	200mm	6.0kg
Double-slider	Y high-speed type	450mm	400mm	3.0kg
	Y medium-speed type	450mm	400mm	6.0kg

XZ (Upright type)

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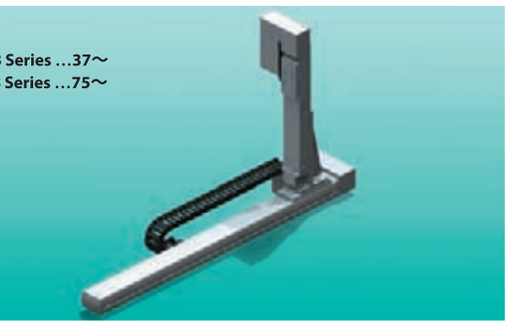
IK2-PXZB Series ...37〜
IK2-SXZB Series ...75〜



• IK2-PXZB Series • IK2-SXZB Series

		Maximum X-axis stroke	Maximum Z-axis stroke	Load capacity at maximum Y-axis stroke
Single-slider	X high-speed/Z high-speed type	1,000mm	250mm	1.5kg
	X high-speed/Z medium-speed type	1,000mm	250mm	2.5kg
	X high-speed/Z low-speed type	1,000mm	250mm	3.0kg
Double-slider	X high-speed/Z high-speed type	800mm	300mm	1.5kg
	X high-speed/Z medium-speed type	800mm	300mm	3.0kg
	X high-speed/Z low-speed type	800mm	300mm	5.5kg

YZB (Cross type, base mount)

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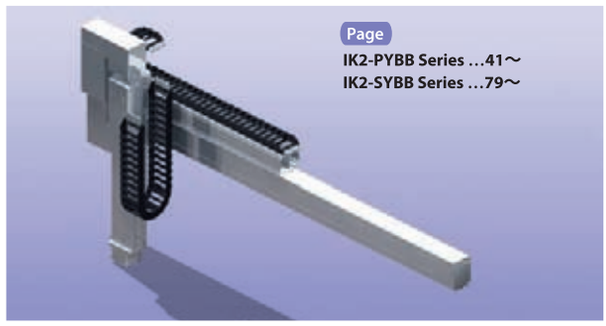
IK2-PYBB Series ...41〜
IK2-SYBB Series ...79〜



• IK2-PYBB Series • IK2-SYBB Series

		Maximum X-axis stroke	Maximum Z-axis stroke	Load capacity at maximum Y-axis stroke
Single-slider	X high-speed/Z high-speed type	1,000mm	300mm	1.5kg
	X high-speed/Z medium-speed type	1,000mm	300mm	3.0kg
	X high-speed/Z low-speed type	1,000mm	300mm	5.5kg

IK2-P Series / IK3-P Series	**ROBO Cylinder RCP2 combinations based on pulse motor**
IK2-S Series / IK3-S Series	**ROBO Cylinder RCS2 combinations based on servo motor**

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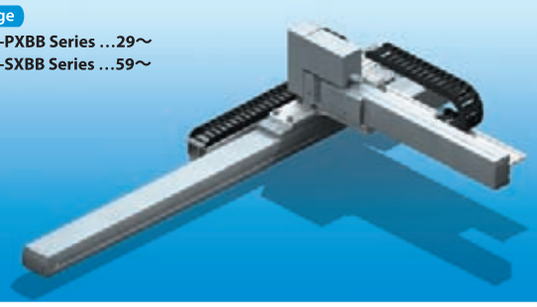
IK2-PXBB Series …29〜
IK2-SXBB Series …59〜



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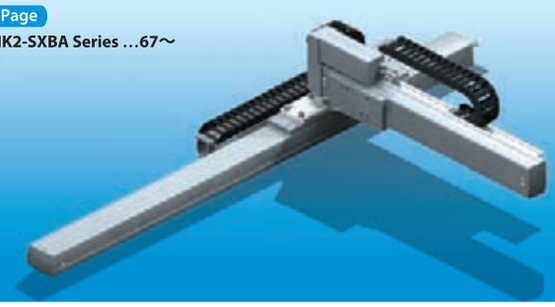
IK2-SXBA Series …67〜



• IK2-PXBB Series • IK2-SXBB Series

		Maximum X-axis stroke	Maximum Y-axis stroke	Load capacity at maximum Y-axis stroke
Single-slider	High-speed type	1,000mm	300mm	6.0kg
	Medium-speed type	1,000mm	300mm	8.0kg
Double-slider	High-speed type	800mm	400mm	5.5kg
	Medium-speed type	800mm	400mm	10.5kg

• IK2-SXBA Series

		Maximum X-axis stroke	Maximum Y-axis stroke	Load capacity at maximum Y-axis stroke
Single-slider	High-speed type	1,000mm	350mm	7.0kg
	Medium-speed type	1,000mm	200mm	12.5kg
Double-slider	High-speed type	800mm	400mm	10.0kg
	Medium-speed type	800mm	400mm	11.5kg

3-axis type (XYB+Z, base mount)

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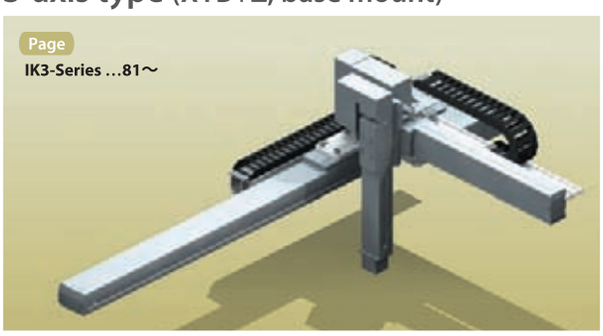
IK3-Series …81〜



• IK3 Series

		Maximum X-axis stroke	Maximum Y-axis stroke	Maximum Z-axis stroke	Load capacity at maximum Y-axis stroke
Single-slider	X high-speed/Y high-speed/Z high-speed type	1,000mm	300mm	200mm	1.0kg
	X high-speed/Y high-speed/Z medium-speed type	1,000mm	300mm	200mm	2.0kg
	X high-speed/Y high-speed/Z low-speed type	1,000mm	300mm	200mm	4.0kg
Double-slider	X high-speed/Y high-speed/Z high-speed type	800mm	400mm	200mm	1.0kg
	X high-speed/Y high-speed/Z medium-speed type	800mm	400mm	200mm	2.0kg
	X high-speed/Y high-speed/Z low-speed type	800mm	400mm	200mm	4.0kg

2-axis combination – Axis configurations

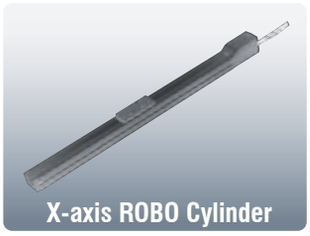
	Axis 1	Axis 2
IK2-PXBD IK2-SXBD	RCP2-SS7□ RCS2-SS7□	RCP2-SA5R RCS2-SA5R
IK2-PXBC IK2-SXBC	RCP2-SS7□ RCS2-SS7□	RCP2-SA6R RCS2-SA6R
IK2-PXBB IK2-SXBB	RCP2-SS8□ RCS2-SS8□ (100W)	RCP2-SA7R RCS2-SA7R
IK2-SXBA	RCS2-SS8□ (150W)	RCS2-SS8R (100W)
IK2-PXZB IK2-SXZB	RCP2-SS8□ RCS2-SS8□ (100W)	RCP2-SA7R RCS2-SA7R
IK2-PYBB IK2-SYBB	RCP2-SS8□ RCS2-SS8□ (100W)	RCP2-SA7R RCS2-SA7R

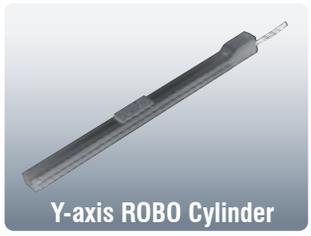
3-axis combination – Axis configurations

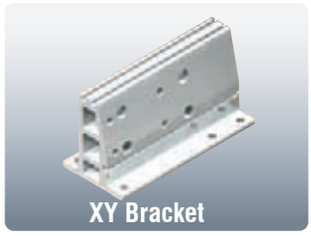
	X axis	Y axis	Z axis
IK3	RCP2-SS8□ RCS2-SS8□ (100W)	RCP2-SA7R RCS2-SA7R	RCP2-SA6R RCS2-SA6R

IK Series

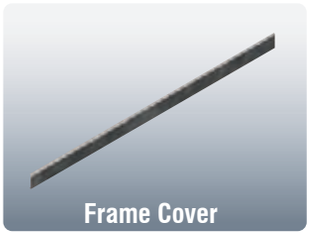
The IK Series is a set that includes the following components needed to assemble the cartesian robot.

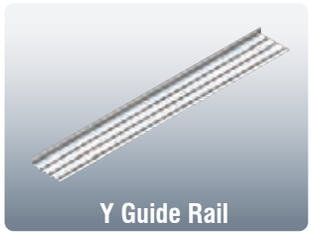

X-axis ROBO Cylinder

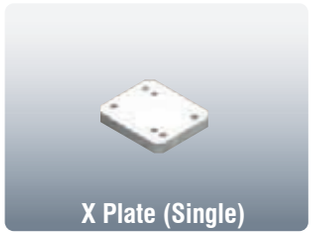

Y-axis ROBO Cylinder

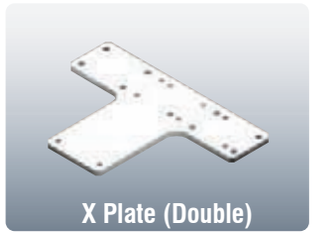

XY Bracket

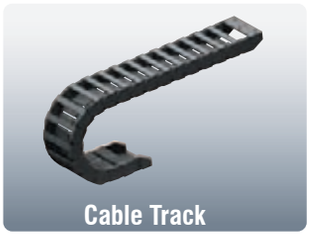

X Guide Rail


Frame Cover

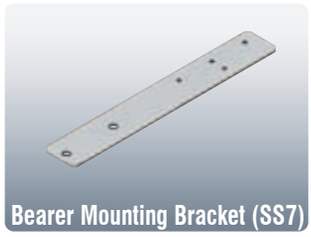

Y Guide Rail

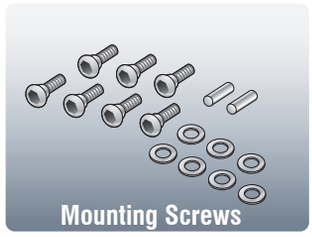

X Plate (Single)


X Plate (Double)

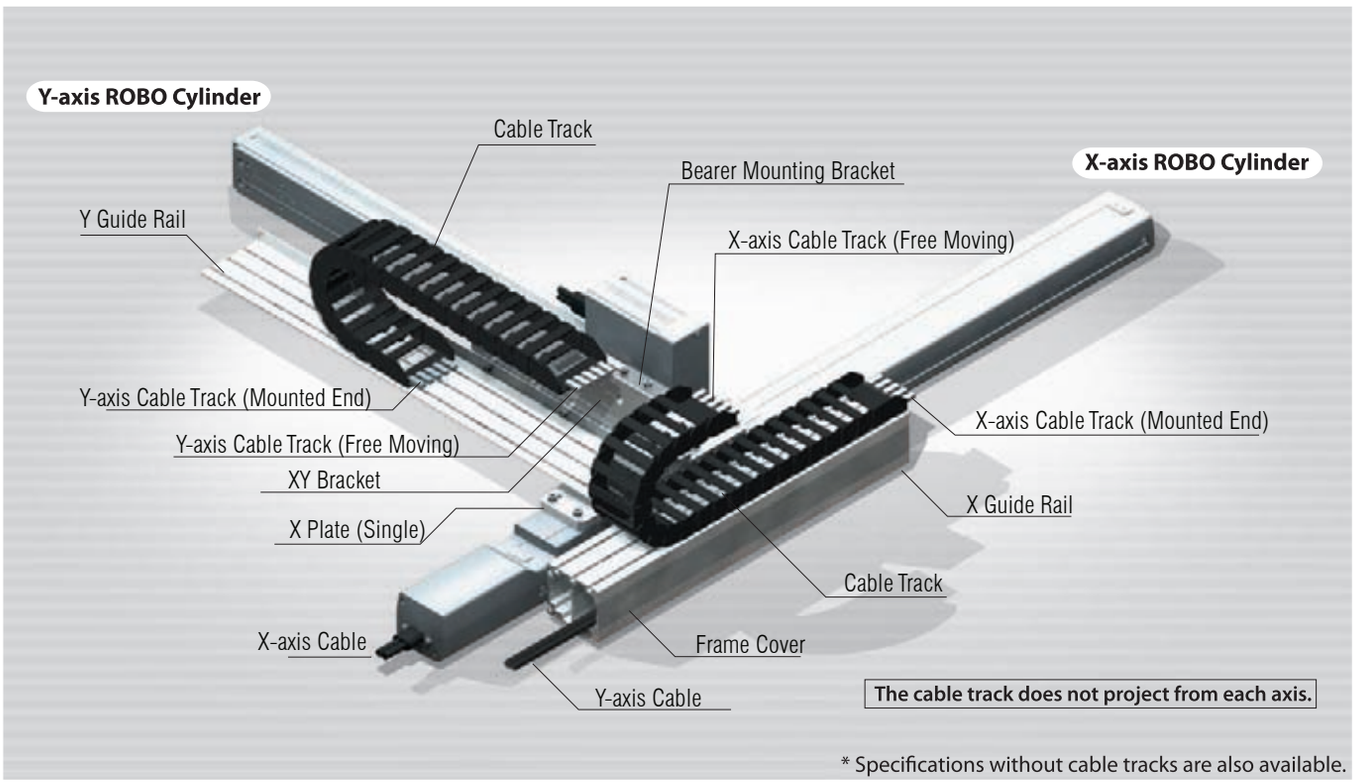

Cable Track


Bearer Mounting Bracket (SS8)


Bearer Mounting Bracket (SS7)


Mounting Screws

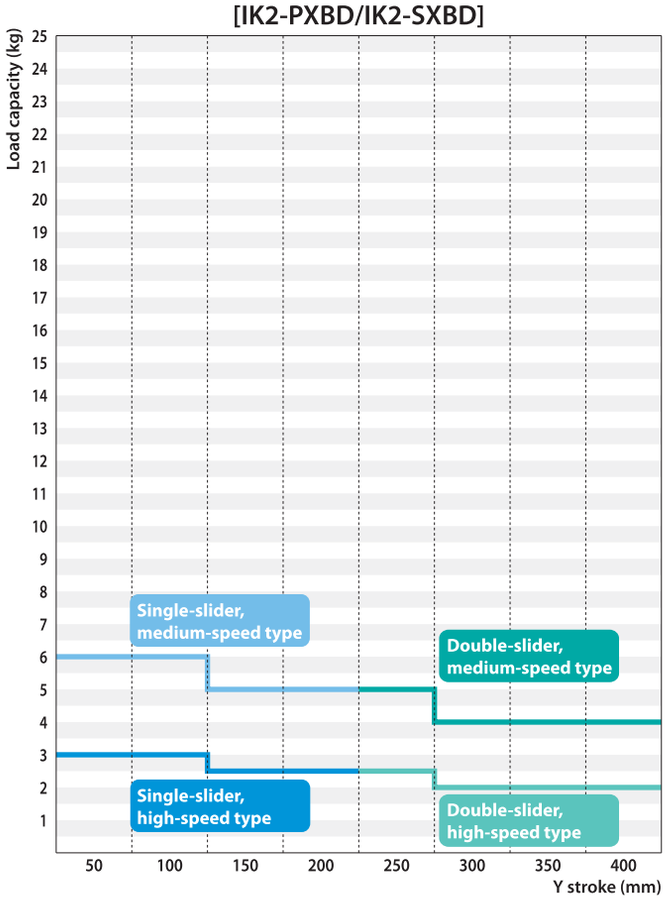
Note: The above images are provided for reference purposes only.
The actual components may vary depending on the combination type, direction, etc.



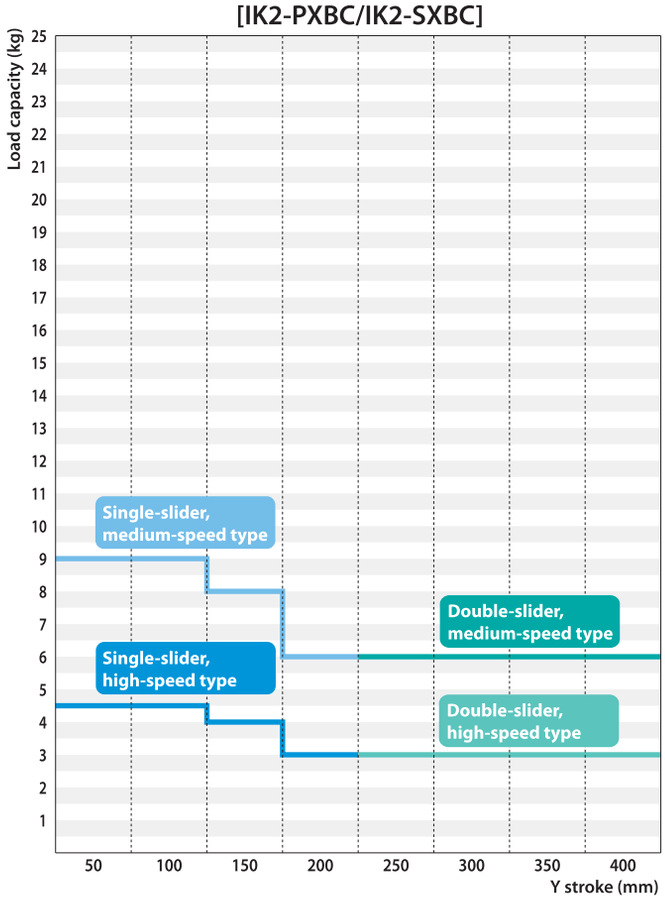
* Specifications without cable tracks are also available.

Load Capacity Graphs for XYB Combinations

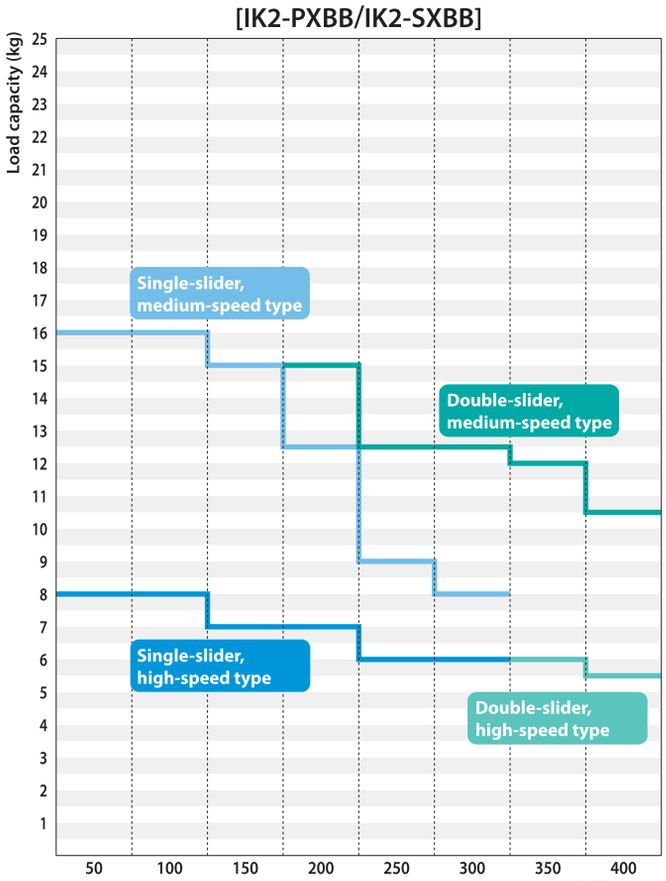
[IK2-PXBD/IK2-SXBD]



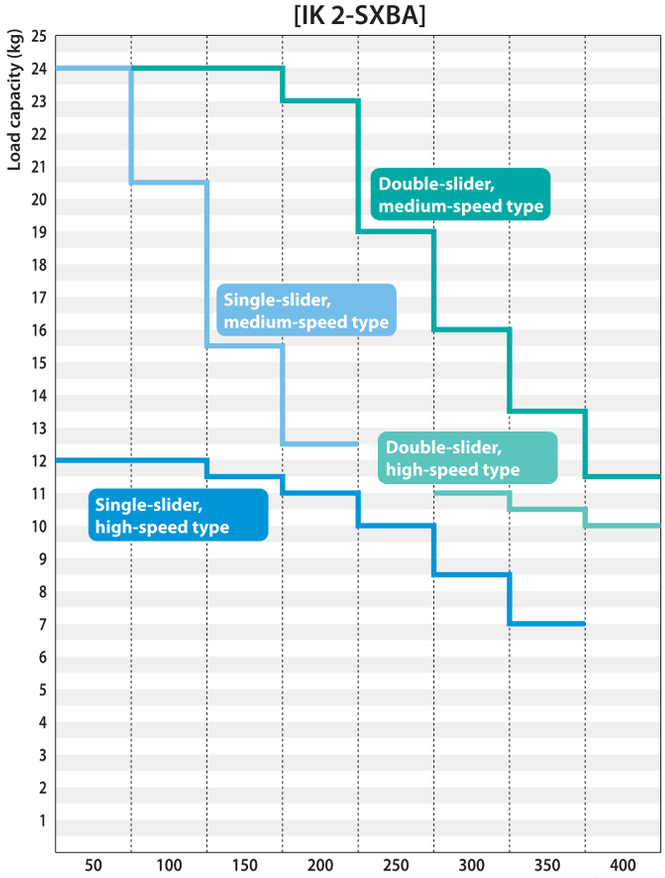
[IK2-PXBC/IK2-SXBC]



[IK2-PXBB/IK2-SXBB]



[IK 2-SXBA]



RCP2 Combination Unit List for 2-axis Configuration (XYB)

(☐ in the model names indicates a value from 1 to 4 specifying the combination direction. For the combination directions, refer to P. 10.)

Page	Combination model	Combined shape	Axis 1					Axis 2	
			Type	Motor size	Lead (mm)	Maximum speed (mm/sec)	Stroke (mm)	Type	
13	IK2-PXBD1☐HHS	XYB	SS7R Reversed	42☐	12	400	50–600	SA5R Reversed	
	IK2-PXBD1☐HMS				12	350			
15	IK2-PXBD1☐HHD		SS7R Reversed, double-slider		12	400	50–450		
	IK2-PXBD1☐HMD				12	350			
17	IK2-PXBD2☐HHS		SS7C Straight		12	400	50–600		
	IK2-PXBD2☐HMS				12	350			
19	IK2-PXBD2☐HHD		SS7C Straight, double-slider		12	400	50–450		
	IK2-PXBD2☐HMD				12	350			
21	IK2-PXBC1☐HHS		SS7R Reversed		12	400	50–600	SA6R Reversed	
	IK2-PXBC1☐HMS				12	250			
23	IK2-PXBC1☐HHD		SS7R Reversed, double-slider		12	400	50–450		
	IK2-PXBC1☐HMD				12	250			
25	IK2-PXBC2☐HHS		SS7C Straight		12	400	50–600		
	IK2-PXBC2☐HMS				12	250			
27	IK2-PXBC2☐HHD		SS7C Straight, double-slider		12	400	50–450		
	IK2-PXBC2☐HMD				12	250			
29	IK2-PXBB1☐HHS		SS8R Reversed	56☐	20	250	50–1000	SA7R Reversed	
	IK2-PXBB1☐MMS				10	125			
31	IK2-PXBB1☐HHD		SS8R Reversed, double-slider		20	250	50–800		
	IK2-PXBB1☐MMD				10	125			
33	IK2-PXBB2☐HHS		SS8C Straight		20	250	50–1000		
	IK2-PXBB2☐MMS				10	125			
35	IK2-PXBB2☐HHD		SS8C Straight, double-slider		20	250	50–800		
	IK2-PXBB2☐MMD				10	125			
37	IK2-PXZB1☐HHS	XZ	SS8R Reversed	56☐	20	250	50–1000	SA7R Reversed	
	IK2-PXZB1☐HMS								
	IK2-PXZB1☐HLS								
39	IK2-PXZB1☐HHD		SS8R Reversed, double-slider				50–800		
	IK2-PXZB1☐HMD								
	IK2-PXZB1☐HLD								
41	IK2-PYBB1☐HHS	YZB	SS8R Reversed				50–1000		
	IK2-PYBB1☐HMS								
	IK2-PYBB1☐HLS								

RCS2 Combination Unit List for 2-axis Configuration (XYB)

(☐ in the model names indicates a value from 1 to 4 specifying the combination direction. For the combination directions, refer to P. 10.)

Page	Combination model	Combined shape	Axis 1					Axis 2	
			Type	Motor output (W)	Lead (mm)	Maximum speed (mm/sec)	Stroke (mm)	Type	
43	IK2-SXBD1☐HHS	XYB	SS7R Reversed	60	12	600	50–600	SA5R Reversed	
	IK2-SXBD1☐HMS				12	600			
45	IK2-SXBD1☐HHD		SS7R Reversed, double-slider		12	600	50–450		
	IK2-SXBD1☐HMD				12	600			
47	IK2-SXBD2☐HHS		SS7C Straight		12	600	50–600		
	IK2-SXBD2☐HMS				12	600			
49	IK2-SXBD2☐HHD		SS7C Straight, double-slider		12	600	50–450		
	IK2-SXBD2☐HMD				12	600			
51	IK2-SXBC1☐HHS		SS7R Reversed		12	600	50–600	SA6R Reversed	
	IK2-SXBC1☐MMS				6	300			
53	IK2-SXBC1☐HHD		SS7R Reversed, double-slider		12	600	50–450		
	IK2-SXBC1☐MMD				6	300			
55	IK2-SXBC2☐HHS		SS7C Straight		12	600	50–600		
	IK2-SXBC2☐MMS				6	300			
57	IK2-SXBC2☐HHD		SS7C Straight, double-slider		12	600	50–450		
	IK2-SXBC2☐MMD				6	300			
59	IK2-SXBB1☐HHS		SS8R (100W) Reversed	100	20	1000	50–1000	SA7R Reversed	
	IK2-SXBB1☐MMS				10	500			
61	IK2-SXBB1☐HHD		SS8R (100W) Reversed, double-slider		20	1000	50–800		
	IK2-SXBB1☐MMD				10	500			
63	IK2-SXBB2☐HHS		SS8C (100W) Straight		20	1000	50–1000		
	IK2-SXBB2☐MMS				10	500			
65	IK2-SXBB2☐HHD		SS8C (100W) Straight, double-slider		20	1000	50–800		
	IK2-SXBB2☐MMD				10	500			
67	IK2-SXBA1☐HHS		SS8R (150W) Reversed	150	20	1000	50–1000	SS8R (100W) Reversed	
	IK2-SXBA1☐MMS				10	500			
69	IK2-SXBA1☐HHD		SS8R (150W) Reversed, double-slider		20	1000	50–800		
	IK2-SXBA1☐MMD				10	500			
71	IK2-SXBA2☐HHS		SS8C (150W) Straight		20	1000	50–1000		
	IK2-SXBA2☐MMS				10	500			
73	IK2-SXBA2☐HHD		SS8C (150W) Straight, double-slider		20	1000	50–800		
	IK2-SXBA2☐MMD				10	500			
75	IK2-SXZB1☐HHS	XZ	SS8R (100W) Reversed	100	20	1000	50–1000	SA7R Reversed	
	IK2-SXZB1☐HMS								
	IK2-SXZB1☐HLS								
77	IK2-SXZB1☐HHD		SS8R (100W) Reversed, double-slider				50–800		
	IK2-SXZB1☐HMD								
	IK2-SXZB1☐HLD								
79	IK2-SYBB1☐HHS	YZB	SS8R (100W) Reversed				50–1000		
	IK2-SYBB1☐HMS								
	IK2-SYBB1☐HLS								

Axis 1: Mount axis **Axis 2:** Axis installed on axis 1 **Axis 3:** Axis installed on axis 2 **Cable wiring 1:** Wiring for axis 2 **Cable wiring 2:** Wiring for axis 3

Axis 2				Load capacity by axis 2 stroke							
Motor size	Lead (mm)	Maximum speed (mm/sec)	Stroke (mm)	50	100	150	200	250	300	350	400
42□	12	600	50–200	3.0	3.0	2.5	2.5				
	6	300	50–200	6.0	6.0	5.0	5.0				
	12	600	250–400					2.5	2.0	2.0	2.0
	6	300	250–400					5.0	4.0	4.0	4.0
	12	600	50–200	3.0	3.0	2.5	2.5				
	6	300	50–200	6.0	6.0	5.0	5.0				
	12	600	250–400					2.5	2.0	2.0	2.0
	6	300	250–400					5.0	4.0	4.0	4.0
42□	12	600	50–200	4.5	4.5	4.0	3.0				
	6	300	50–200	9.0	9.0	8.0	6.0				
	12	600	250–400					3.0	3.0	3.0	3.0
	6	300	250–400					6.0	6.0	6.0	6.0
	12	600	50–200	4.5	4.5	4.0	3.0				
	6	300	50–200	9.0	9.0	8.0	6.0				
	12	600	250–400					3.0	3.0	3.0	3.0
	6	300	250–400					6.0	6.0	6.0	6.0
56□	16	450	50–300	8.0	8.0	7.0	7.0	6.0	6.0		
	8	220	50–300	16.0	16.0	15.0	12.5	9.0	8.0		
	16	450	350–400							6.0	5.5
	8	220	200–400				15.0	12.5	12.5	12.0	10.5
	16	450	50–300	8.0	8.0	7.0	7.0	6.0	6.0		
	8	220	50–300	16.0	16.0	15.0	12.5	9.0	8.0		
	16	450	350–400							6.0	5.5
	8	220	200–400				15.0	12.5	12.5	12.0	10.5
56□	16	360	50–250	2.0	2.0	2.0	2.0	1.5			
	8	180	50–250	4.0	4.0	3.5	3.5	2.5			
	4	90	50–250	8.0	7.0	5.0	4.0	3.0			
	16	400	300						1.5		
	8	200	300						3.0		
	4	100	150–300			7.0	7.0	5.5	5.5		
	16	360	50–300	2.0	2.0	2.0	2.0	1.5	1.5		
	8	180	50–300	4.0	4.0	3.5	3.5	3.0	3.0		
	4	90	50–300	8.0	8.0	7.0	7.0	6.0	5.5		

Axis 1: Mount axis **Axis 2:** Axis installed on axis 1 **Axis 3:** Axis installed on axis 2 **Cable wiring 1:** Wiring for axis 2 **Cable wiring 2:** Wiring for axis 3

Axis 2				Load capacity by axis 2 stroke							
Motor output (W)	Lead (mm)	Maximum speed (mm/sec)	Stroke (mm)	50	100	150	200	250	300	350	400
20	12	800	50–200	3.0	3.0	2.5	2.5				
	6	400		6.0	6.0	5.0	5.0				
	12	800	250–400					2.5	2.0	2.0	2.0
	6	400						5.0	4.0	4.0	4.0
	12	800	50–200	3.0	3.0	2.5	2.5				
	6	400		6.0	6.0	5.0	5.0				
	12	800	250–400					2.5	2.0	2.0	2.0
	6	400						5.0	4.0	4.0	4.0
30	12	800	50–200	4.5	4.5	4.0	3.0				
	6	400		9.0	9.0	8.0	6.0				
	12	800	250–400					3.0	3.0	3.0	3.0
	6	400						6.0	6.0	6.0	6.0
	12	800	50–200	4.5	4.5	4.0	3.0				
	6	400		9.0	9.0	8.0	6.0				
	12	800	250–400					3.0	3.0	3.0	3.0
	6	400						6.0	6.0	6.0	6.0
60	16	800	50–300	8.0	8.0	7.0	7.0	6.0	6.0		
	8	400		16.0	16.0	15.0	12.5	9.0	8.0		
	16	800	350–400							6.0	5.5
	8	400	200–400				15.0	12.5	12.5	12.0	10.5
	16	800	50–300	8.0	8.0	7.0	7.0	6.0	6.0		
	8	400		16.0	16.0	15.0	12.5	9.0	8.0		
	16	800	350–400							6.0	5.5
	8	400	200–400				15.0	12.5	12.5	12.0	10.5
100	20	1000	50–350	12.0	12.0	11.5	11.0	10.0	8.5	7.0	
	10	500		24.0	20.5	15.5	12.5				
	20	1000	300–400						11.0	10.5	10.0
	10	500	100–400		24.0	24.0	23.0	19.0	16.0	13.5	11.5
	20	1000	50–350	12.0	12.0	11.5	11.0	10.0	8.5	7.0	
	10	500		24.0	20.5	15.5	12.5				
	20	1000	300–400						11.0	10.5	10.0
	10	500	100–400		24.0	24.0	23.0	19.0	16.0	13.5	11.5
60	16	800	50–250	2.0	2.0	2.0	2.0	1.5			
	8	400		4.0	4.0	3.5	3.5	2.5			
	4	200		8.0	7.0	5.0	4.0	3.0			
	16	800	300						1.5		
	8	400							3.0		
	4	200	150–300			7.0	7.0	5.5	5.5		
	16	800	50–300	2.0	2.0	2.0	2.0	1.5	1.5		
	8	400		4.0	4.0	3.5	3.5	3.0	3.0		
	4	200		8.0	8.0	7.0	7.0	6.0	5.5		

RCP2 Combination Unit List for 3-axis Configuration (XYB+Z-axes, base mount) (☐ in the model names indicates a value from 1 to 4 specifying the combination direction. For the combination directions, refer to P. 10.)

Page	Combination model	Combined shape	X axis					Y axis
			Type	Motor size	Lead (mm)	Maximum speed (mm/sec)	Stroke (mm)	Type
81	IK3-PBBG1☐HHHS IK3-PBBG1☐HHMS IK3-PBBG1☐HHLS	XYB+Z, base mount	SS8R Reversed, single-slider	56☐	20	220	50–1000	SA7R Reversed
83	IK3-PBBG1☐HHHD IK3-PBBG1☐HHMD IK3-PBBG1☐HHLD		SS8R Reversed, double-slider				50–800	

RCS2 Combination Unit List for 3-axis Configuration (XYB+Z-axes, base mount) (☐ in the model names indicates a value from 1 to 4 specifying the combination direction. For the combination directions, refer to P. 10.)

Page	Combination model	Combined shape	X axis					Y axis
			Type	Motor output (W)	Lead (mm)	Maximum speed (mm/sec)	Stroke (mm)	Type
85	IK3-SBBG1☐HHHS IK3-SBBG1☐HHMS IK3-SBBG1☐HHLS	XYB+Z, base mount	SS8R (100W) Reversed, single-slider	100	20	1000	50–1000	SA7R Reversed
88	IK3-SBBG1☐HHHD IK3-SBBG1☐HHMD IK3-SBBG1☐HHLD		SS8R (100W) Reversed, double-slider				50–800	

Tips on Selection

1. Differences between RCP2 and RCS2

Features of RCP2

[1] Adopting a pulse motor.

[2] Characterized by high thrust at low speed.

[3] Less expensive than the RCS2.

Features of RCS2

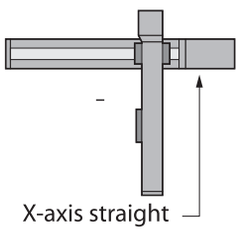
[1] Adopting a servo motor.

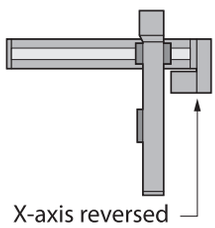
[2] Able to operate at a constant thrust regardless of the speed.

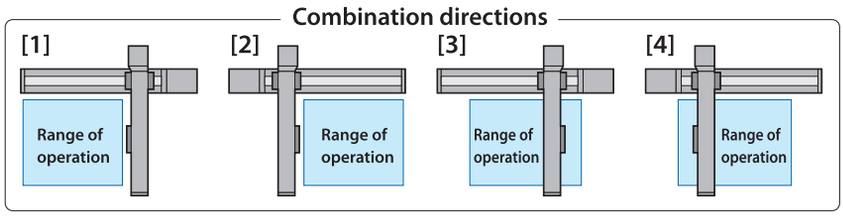
[3] Able to move at higher speeds than the RCP2.

2. Differences between X-axis Straight and Reversed Types

The X-axis reversed type can have a shorter dimension in the X-axis direction. When the 150-watt RCS2-SS8C (straight) and 150-watt SS8R (reversed) are compared, for example, the SS8R is shorter by 130 mm. Note, however, that the reversed type does not support configurations based on combination directions [3] and [4].

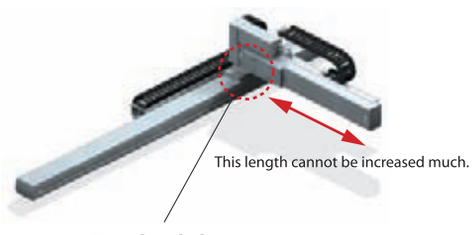


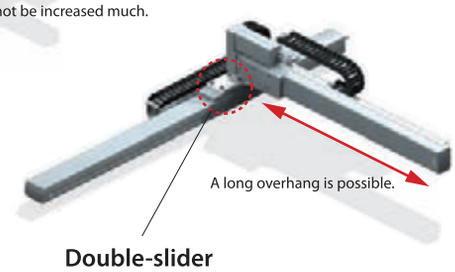




3. Differences between Single-slider and Double-slider Types

A double-slider consists of two sliders connected to each other and has a greater permissible load moment compared to a single-slider type. Accordingly, double-slider units are used as the X-axis in XY configurations with a long overhang.
Note, however, that because the double-slider structure naturally has a longer slider section, a double-slider unit has a shorter stroke than a single-slider unit of the same total length.





Y axis				Z axis					Load capacity by Y-axis stroke							
Motor size	Lead (mm)	Maximum speed (mm/sec)	Stroke (mm)	Type	Motor size	Lead (mm)	Maximum speed (mm/sec)	Stroke (mm)	50	100	150	200	250	300	350	400
56□	16	420	50–300	SA6R Reversed	42□	12	500	50–200	1.0							
						6	250		2.0							
						3	125		4.0							
			350–400			12	500								1.0	
						6	250								2.0	
						3	125								4.0	

Y axis				Z axis					Load capacity by Y-axis stroke							
Motor output (W)	Lead (mm)	Maximum speed (mm/sec)	Stroke (mm)	Type	Motor output (W)	Lead (mm)	Maximum speed (mm/sec)	Stroke (mm)	50	100	150	200	250	300	350	400
60	16	800	50–300	SA6R Reversed	30	12	800	50–200	1.0							
						6	400		2.0							
						3	200		4.0							
			350–400			12	800								1.0	
						6	400								2.0	
						3	200								4.0	

Explanation of Items Comprising Model Name

[IK Series, 2-axis combination unit]

IK2–□□□□□□–□–□□–□□–□–□–□–□–□

[1] [2] [3] [4] [5] [6] [7] [8] [9] [10] [11] [14] [15] [16] [17] [18]

[IK Series, 3-axis combination unit]

IK3–□□□□□□–□–□□–□□–□–□–□–□–□

[1] [2] [3] [4] [5] [6] [7] [8] [9] [10] [11] [12] [13] [14] [15] [16] [17] [18]

[1]Axis configuration

Code	Model
P	RCP2
S	RCS2

[2]Combined shape

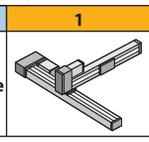
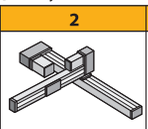
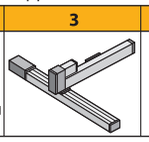
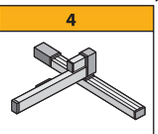
Code	Combined shape	Name
XB	XYB	XY, base mount
XZ	XZ	Upright type
YB	YZB	Cross type, base mount
BB	XYB+ZB	XYB+Z, base mount

[3]Configuration type

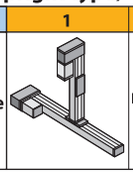
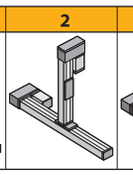
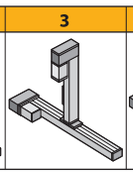
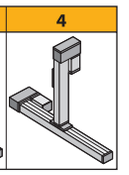
Code	Axis 1	Axis 2	Axis 3
A1	SS8R (150W)	SS8R (100W)	
A2	SS8C (150W)	SS8R (100W)	
B1	SS8R (100W)	SA7R	
B2	SS8C (100W)	SA7R	
C1	SS7R	SA6R	
C2	SS7C	SA6R	
D1	SS7R	SA5R	
D2	SS7C	SA5R	
G1	SS8R (100W)	SA7R	SA6R

[4]Combination directions

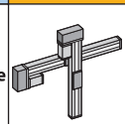
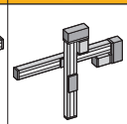
XYB (XY, base mount) *Only 1 and 2 are supported if the X-axis is of reversed type.

Code	1	2	3	4
Shape				

XZ (Upright type)

Code	1	2	3	4
Shape				

YZB (Cross type, base mount)

Code	1	2
Shape		

The combination directions supported by the 3-axis configuration (XYB+Z-axes, base mount) are the same as those of the XYB configuration shown above.

[5]Speed type

Code	Type		
HH	High-speed	High-speed	
HM	High-speed	Medium-speed	
HL	High-speed	Low-speed	
MM	Medium-speed	Medium-speed	
HHH	High-speed	High-speed	High-speed
HHM	High-speed	High-speed	Medium-speed
HHL	High-speed	High-speed	Low-speed

[6]X-Axis Slider Type

Code	Type
S	Single
D	Double

[7]Encoder Type

Code	Type
I	Incremental
A	Absolute

[8]Axis 1 stroke (cm)

5:50mm–100:1000mm
(Can be set in 50-mm increments)

[10]Axis 2 stroke (cm)

5:50mm–40:400mm
(Can be set in 50-mm increments)

[12]Axis 3 stroke (cm)

5:50mm–20:200mm
(Can be set in 50-mm increments)

[9]Axis 1 options

Code	Description
NM	Reversed-home specification
SR	Slider roller specification

[11]Axis 2 options

Code	Description
B	Brake
NM	Reversed-home specification
SR	Slider roller specification

[13]Axis 3 options

Code	Description
B	Brake
NM	Reversed-home specification
SR	Slider roller specification

Axis 1: Mount axis
Axis 2: Axis installed on axis 1
Axis 3: Axis 3: Axis installed on axis 2
Cable wiring 1: Wiring for axis 2
Cable wiring 2: Wiring for axis 3

[14]Applicable controller

Code	Model
T1	XSEL-KE/KET
T2	SSEL, XSEL-P/Q
P1	PSEL, ROBONET

[15]Cable length

Code	Description
1L	1m
3L	3m
5L	5m
□L	□m

[16]Cable wiring 1

Code	Description
N	Cable only
CT	With cable track

[17]Cable wiring 2

Code	Description
N	Cable only
CT	With cable track

[18]Shipping configuration

Code	Description
K	Individual components (kit)
A	Finished assembly

IK2-PXBD1□□S

RCP2 2-axis Combinations X axis: SS7R (Reversed, Single-slider)
Y axis: SA5R (Reversed)

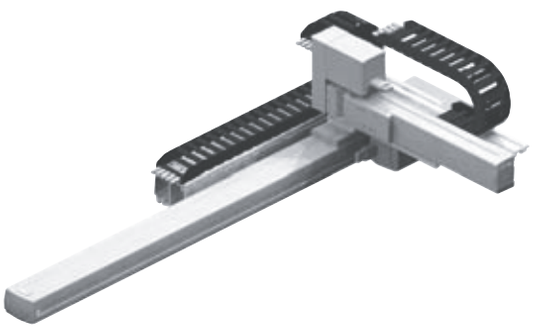
Model Details

Series — Type — Encoder type — Axis 1 (X axis) — Axis 2 (Y axis) — Controllers — Cable — Shipping configuration

IK2 — PXBD1□□S — □ — □ □ — □ □ — P1 — □ — □ — □ — □

- **Combination directions** 1-2
- **Differences between Single-slider and Double-slider Types** HH: X high-speed, Y high-speed; HM: X high-speed, Y medium-speed
- **Encoder type** I: Incremental
- **Stroke (mm)** 5: 50mm ~ (Can be set in 50-mm increments)
- **Options** NM: Opposite-home specification; SR: Slider roller specification
- **Controllers** P1
- **Cable length** 1L: 1m; 3L: 3m; 5L: 5m; □L: □m
- **Wiring 1** N: Cable only; CT: With cable track
- **Wiring 2**
- **Shipping configuration** K: Individual components (kit); A: Assembled

* Refer to P. 10 for details on the items comprising the model name.



Both wiring 1 and wiring 2 assume use of a cable track.

Maximum Stroke

X axis 600 mm Y axis 200 mm

Axis 2 (High-speed type)

X axis 400 mm/s Y axis 600 mm/s

Maximum Load Capacity

Y-axis stroke	X high-speed, Y high-speed	X high-speed, Y medium-speed
50mm	3.0kg	6.0kg
100mm	3.0kg	6.0kg
150mm	2.5kg	5.0kg
200mm	2.5kg	5.0kg

Cable Length

Type	Cable code	Length
Standard type	**1L**	1m
	3L	3m
	5L	5m

* Axis 1 comes with a standard cable, while axis 2 comes with a robot cable.
** Cable length of second axis is defined by the length outside of cable track. If CT option is not choosed, longer cable is provided.
*** Refer to P. 89 for lengths other than those specified above.

Cable track

Wiring 1 (Next to X-axis)	X-axis stroke	50-300	350-600
		-	-
Wiring 2 (Next to Y-axis)	Y-axis stroke	50-200	–
		-	–

Options

Name	Option code
Opposite-home specification	**NM**
Slider roller specification	**SR**

Specifications

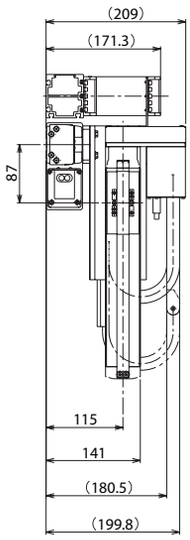
Item	X axis	Y axis
Axis model	RCP2-SS7R	RCP2-SA5R
Stroke (Can be set in 50-mm increments)	50-600mm	50-200mm
Axis 2	HH type: 400mm/s HM type: 350mm/s	High-speed type: 600mm/s Medium-speed type: 300mm/s
Motor size	42-square pulse motor	
Ball screw lead	High-speed type: 12mm	High-speed type: 12mm Medium-speed type: 6mm
Drive method	Ball screw, ø10 mm, rolled, C10	
Positioning repeatability	±0.02mm	
Base material	Dedicated alloy steel	Aluminum
Surrounding air temperature/humidity	0 to 40°C, 85% RH or below (non-condensing)	

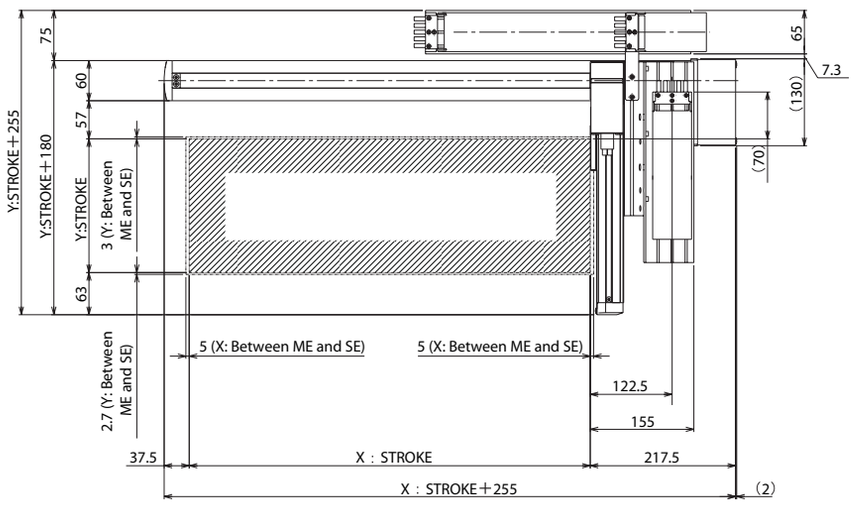
Dimensions

You can download CAD drawings from our website. www.robocylinder.de

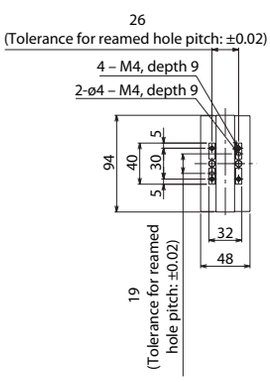
2D CAD

Note 1. The connected position shown in the drawing defines the home.
Note 2. Both wiring 1 and wiring 2 assume use of a cable track.
Note 3. For details on the cable track, refer to P. 90.
Note 4. For details on the bracket on the moving end of the cable track, refer to P. 90.

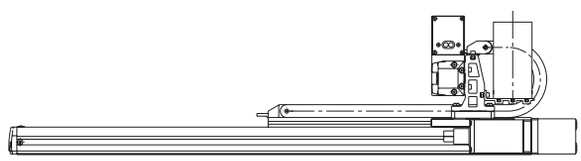




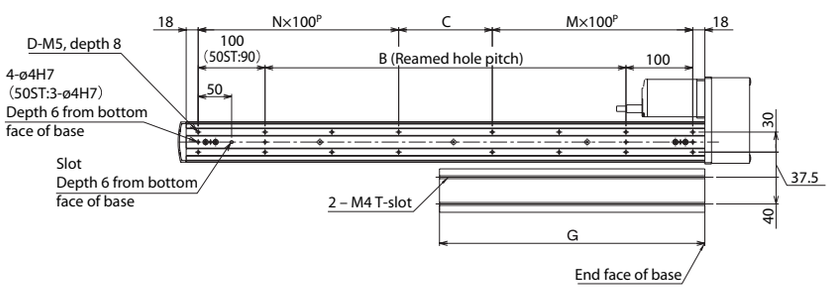
ME: Mechanical end
SE: Stroke end



Detail view of Y-axis slider



Detail view of slot in bottom face of X-axis base



Detail view of X-axis installation

■Dimensions by Stroke

X: Model	50	100	150	200	250	300	350	400	450	500	550	600
B	0	40	90	140	190	240	290	340	390	440	490	540
C	90	40	90	140	190	40	90	140	190	40	90	140
D	6	8	8	8	8	12	12	12	12	16	16	16
M	1	1	1	1	1	2	2	2	2	3	3	3
N	0	1	1	1	1	2	2	2	2	3	3	3
G	122	147	172	197	222	247	272	297	322	347	372	397

Controllers

Applicable controller

Refer to P. 90 for the controllers.

IK2-PXBD1□□D

RCP2 2-axis Combinations X axis: SS7R (Reversed, Double-slider)
Y axis: SA5R (Reversed)

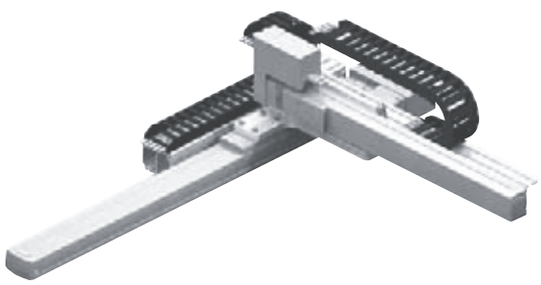
Model Details

Series — Type — Encoder type — Axis 1 (X axis) — Axis 2 (Y axis) — Controllers — Cable — Shipping configuration

IK2 — PXBD1□□D — □ — □ □ — □ □ — P1 — □ — □ — □ — □

- **Combination directions**: 1-2
- **Differences between Single-slider and Double-slider Types**: HH: X high-speed, Y high-speed; HM: X high-speed, Y medium-speed
- **Encoder type**: I: Incremental
- **Stroke (mm)**: 5: 50mm ~ (Can be set in 50-mm increments)
- **Options**: NM: Opposite-home specification; SR: Slider roller specification
- **Cable length**: 1L: 1m; 3L: 3m; 5L: 5m; □L: □m
- **Wiring 1**: N: Cable only; CT: With cable track
- **Wiring 2**
- **Shipping configuration**: K: Individual components (kit); A: Assembled

* Refer to P. 10 for details on the items comprising the model name.



Both wiring 1 and wiring 2 assume use of a cable track.

Maximum Stroke

X axis 450 mm Y axis 400 mm

Axis 2 (High-speed type)

X axis 400 mm/s Y axis 600 mm/s

Maximum Load Capacity

Y-axis stroke	X high-speed, Y high-speed	X high-speed, Y medium-speed
250mm	2.5kg	5.0kg
300mm	2.0kg	4.0kg
350mm	2.0kg	4.0kg
400mm	2.0kg	4.0kg

Cable Length

Type	Cable code	Length
Standard type	**1L**	1m
	3L	3m
	5L	5m

* Axis 1 comes with a standard cable, while axis 2 comes with a robot cable.
** Cable length of second axis is defined by the length outside of cable track. If CT option is not choosed, longer cable is provided.
*** Refer to P. 89 for lengths other than those specified above.

Cable track

Wiring 1 (Next to X-axis)	X-axis stroke	50-300	350-450
		-	-
Wiring 2 (Next to Y-axis)	Y-axis stroke	250-400	–
		-	–

Options

Name	Option code	-
Opposite-home specification	**NM**	-
Slider roller specification	**SR**	Axis 1 (X-axis) Axis 2 (Y-axis)

Specifications

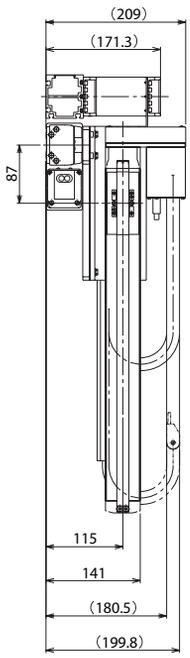
Item	X axis	Y axis
Axis model	RCP2-SS7R	RCP2-SA5R
Stroke (Can be set in 50-mm increments)	50-450mm	250-400mm
Axis 2	HH type: 400mm/s HM type: 350mm/s	High-speed type: 600mm/s Medium-speed type: 300mm/s
Motor size	42-square pulse motor	
Ball screw lead	High-speed type: 12mm	High-speed type: 12mm Medium-speed type: 6mm
Drive method	Ball screw, ø10 mm, rolled, C10	
Positioning repeatability	±0.02mm	
Base material	Dedicated alloy steel	Aluminum
Surrounding air temperature/humidity	0 to 40°C, 85% RH or below (non-condensing)	

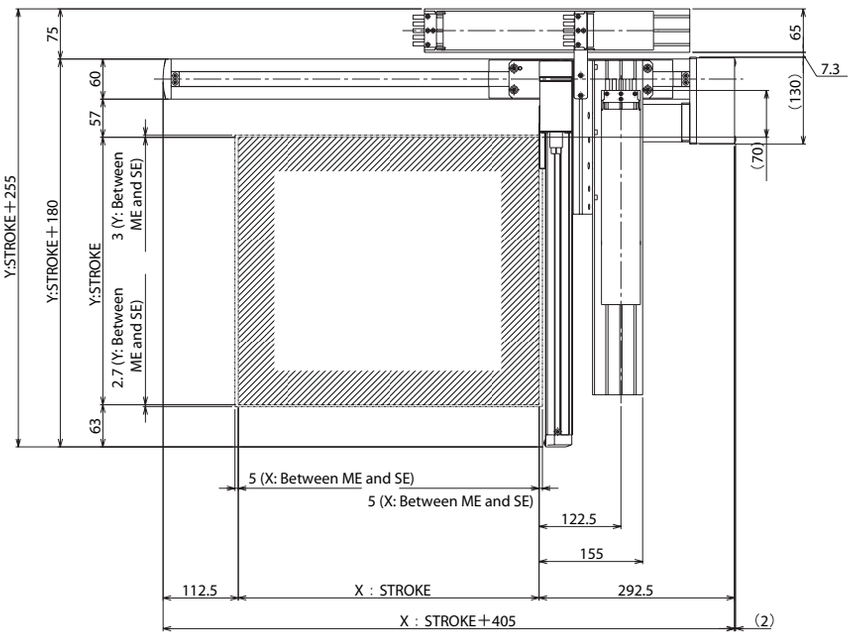
Dimensions

You can download CAD drawings from our website. www.robocylinder.de

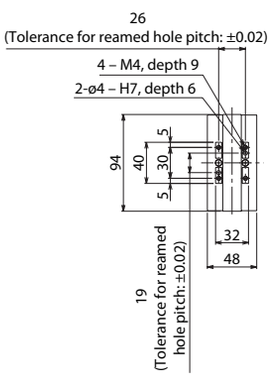
2D CAD

Note 1. The connected position shown in the drawing defines the home.
Note 2. Both wiring 1 and wiring 2 assume use of a cable track.
Note 3. For details on the cable track, refer to P. 90.
Note 4. For details on the bracket on the moving end of the cable track, refer to P. 90.



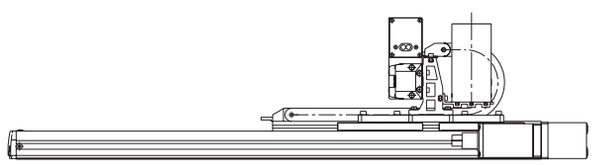


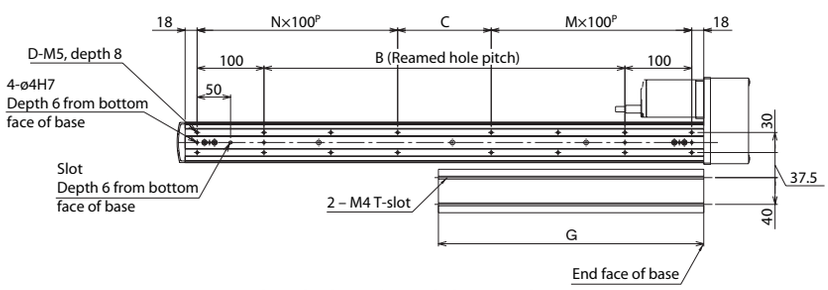
ME: Mechanical end
SE: Stroke end



Detail view of Y-axis slider

Detail view of slot in bottom face of X-axis base





Detail view of X-axis installation

Dimensions by Stroke

X: Nominal stroke	200	250	300	350	400	450	500	550	600
X: Effective stroke	50	100	150	200	250	300	350	400	450
B	140	190	240	290	340	390	440	490	540
C	140	190	40	90	140	190	40	90	140
D	8	8	12	12	12	12	16	16	16
M	1	1	2	2	2	2	3	3	3
N	1	1	2	2	2	2	3	3	3
G	197	222	247	272	297	322	347	372	397

Controllers

Applicable controller

Refer to P. 90 for the controllers.

IK2-PXBD2□□S

RCP2 2-axis Combinations X axis: SS7C (Straight, Single-slider)
Y axis: SA5R (Reversed)

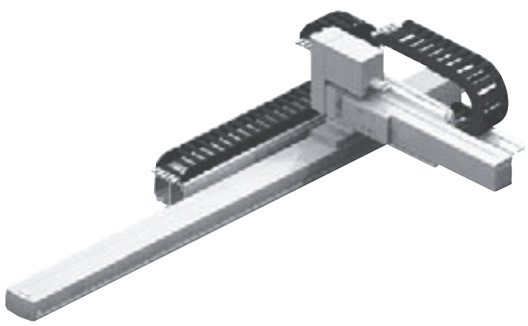
Model Details

Series — Type — Encoder type — Axis 1 (X axis) — Axis 2 (Y axis) — Controllers — Cable — Shipping configuration

IK2 — PXBD2□□S — □ — □ □ — □ □ — P1 — □ — □ — □ — □

- **Combination directions** 1-4
- **Differences between Single-slider and Double-slider Types** HH: X high-speed, Y high-speed; HM: X high-speed, Y medium-speed
- **Encoder type** I: Incremental
- **Stroke (mm)** 5: 50mm ~ (Can be set in 50-mm increments)
- **Options** NM: Opposite-home specification; SR: Slider roller specification
- **Cable length** 1L: 1m; 3L: 3m; 5L: 5m; □L: □m
- **Wiring 1** N: Cable only; CT: With cable track
- **Wiring 2**
- **Shipping configuration** K: Individual components (kit); A: Assembled

* Refer to P. 10 for details on the items comprising the model name.



Both wiring 1 and wiring 2 assume use of a cable track.

Maximum Stroke

X axis 600 mm Y axis 200 mm

Axis 2 (High-speed type)

X axis 400 mm/s Y axis 600 mm/s

Maximum Load Capacity

Y-axis stroke	X high-speed, Y high-speed	X high-speed, Y medium-speed
50mm	3.0kg	6.0kg
100mm	3.0kg	6.0kg
150mm	2.5kg	5.0kg
200mm	2.5kg	5.0kg

Cable Length

Type	Cable code	Length
Standard type	**1L**	1m
	3L	3m
	5L	5m

* Axis 1 comes with a standard cable, while axis 2 comes with a robot cable.
** Cable length of second axis is defined by the length outside of cable track. If CT option is not choosed, longer cable is provided.
*** Refer to P. 89 for lengths other than those specified above.

Cable track

Wiring 1 (Next to X-axis)	X-axis stroke	50-300	350-600
		-	-
Wiring 2 (Next to Y-axis)	Y-axis stroke	50-200	–
		-	–

Options

Name	Option code	
Opposite-home specification	**NM**	
Slider roller specification	**SR**	Axis 1 (X-axis) Axis 2 (Y-axis)

Specifications

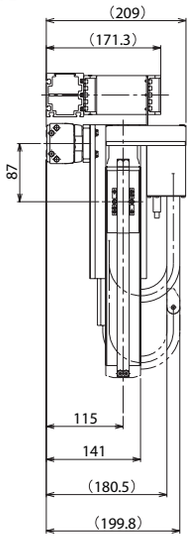
Item	X axis	Y axis
Axis model	RCP2-SS7C	RCP2-SA5R
Stroke (Can be set in 50-mm increments)	50-600mm	50-200mm
Axis 2	HH type: 400mm/s HM type: 350mm/s	High-speed type: 600mm/s Medium-speed type: 300mm/s
Motor size	42-square pulse motor	
Ball screw lead	High-speed type: 12mm	High-speed type: 12mm Medium-speed type: 6mm
Drive method	Ball screw, ø10 mm, rolled, C10	
Positioning repeatability	±0.02mm	
Base material	Dedicated alloy steel	Aluminum
Surrounding air temperature/humidity	0 to 40°C, 85% RH or below (non-condensing)	

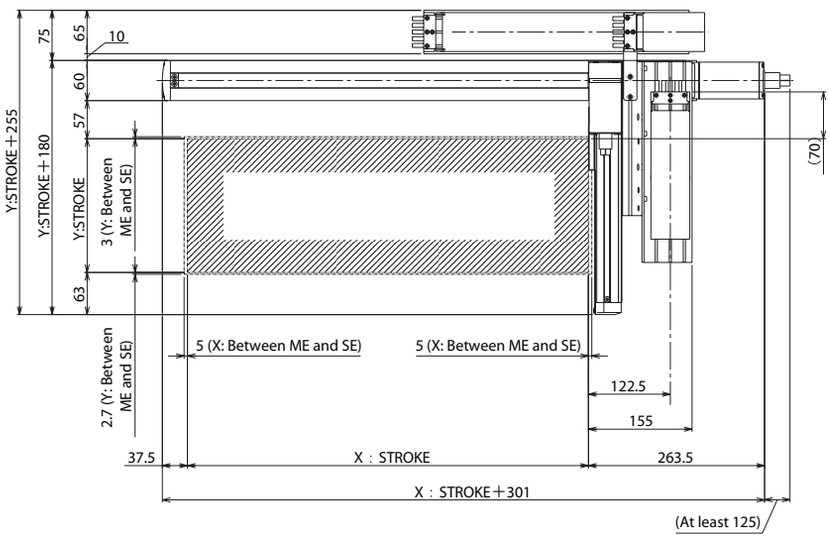
Dimensions

You can download CAD drawings from our website. www.robocylinder.de

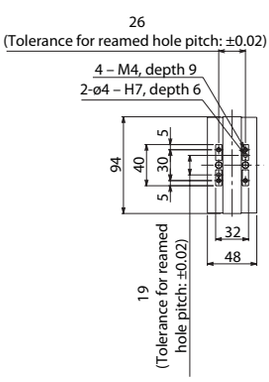
2D CAD

Note 1. The connected position shown in the drawing defines the home.
Note 2. Both wiring 1 and wiring 2 assume use of a cable track.
Note 3. For details on the cable track, refer to P. 90.
Note 4. For details on the bracket on the moving end of the cable track, refer to P. 90.

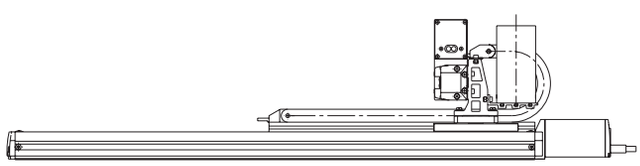




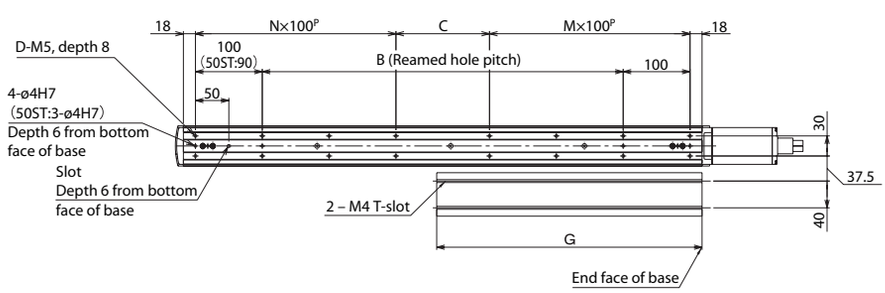
ME: Mechanical end
SE: Stroke end



Detail view of Y-axis slider



Detail view of slot in bottom face of X-axis base



Detail view of X-axis installation

■Dimensions by Stroke

X: Model	50	100	150	200	250	300	350	400	450	500	550	600
B	0	40	90	140	190	240	290	340	390	440	490	540
C	90	40	90	140	190	40	90	140	190	40	90	140
D	6	8	8	8	8	12	12	12	12	16	16	16
M	1	1	1	1	1	2	2	2	2	3	3	3
N	0	1	1	1	1	2	2	2	2	3	3	3
G	122	147	172	197	222	247	272	297	322	347	372	397

Controllers

Applicable controller

Refer to P. 90 for the controllers.

IK2-PXBD2□□D

RCP2 2-axis Combinations X axis: SS7C (Straight, Double-slider)
Y axis: SA5R (Reversed)

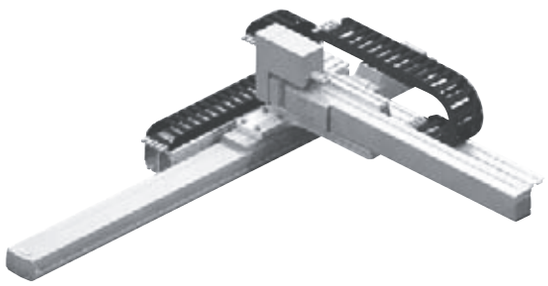
Model Details

Series — Type — Encoder type — Axis 1 (X axis) — Axis 2 (Y axis) — Controllers — Cable — Shipping configuration

IK2 — PXBD2□□D — □ — □ □ — □ □ — P1 — □ — □ — □ — □

- **Combination directions** 1-4
- **Differences between Single-slider and Double-slider Types** HH: X high-speed, Y high-speed; HM: X high-speed, Y medium-speed
- **Encoder type** I: Incremental
- **Stroke (mm)** 5: 50mm ~ (Can be set in 50-mm increments)
- **Options** NM: Opposite-home specification; SR: Slider roller specification
- **Cable length** 1L: 1m; 3L: 3m; 5L: 5m; □L: □m
- **Wiring 1** N: Cable only; CT: With cable track
- **Wiring 2**
- **Shipping configuration** K: Individual components (kit); A: Assembled

* Refer to P. 10 for details on the items comprising the model name.



Both wiring 1 and wiring 2 assume use of a cable track.

Maximum Stroke

X axis 450 mm Y axis 400 mm

Axis 2 (High-speed type)

X axis 400 mm/s Y axis 600 mm/s

Maximum Load Capacity

Y-axis stroke	X high-speed, Y high-speed	X high-speed, Y medium-speed
250mm	2.5kg	5.0kg
300mm	2.0kg	4.0kg
350mm	2.0kg	4.0kg
400mm	2.0kg	4.0kg

Cable Length

Type	Cable code	Length
Standard type	**1L**	1m
	3L	3m
	5L	5m

* Axis 1 comes with a standard cable, while axis 2 comes with a robot cable.
** Cable length of second axis is defined by the length outside of cable track. If CT option is not choosed, longer cable is provided.
*** Refer to P. 89 for lengths other than those specified above.

Cable track

Wiring 1 (Next to X-axis)	X-axis stroke	50-300	350-450
		-	-
Wiring 2 (Next to Y-axis)	Y-axis stroke	250-400	–
		-	–

Options

Name	Option code	
Opposite-home specification	**NM**	
Slider roller specification	**SR**	Axis 1 (X-axis) Axis 2 (Y-axis)

Specifications

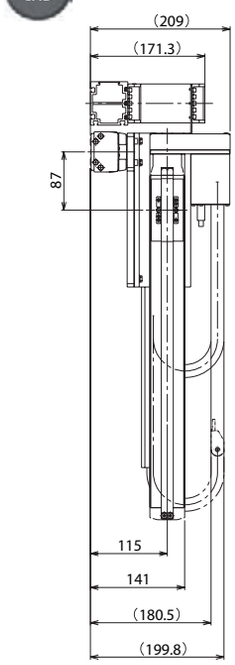
Item	X axis	Y axis
Axis model	RCP2-SS7C	RCP2-SA5R
Stroke (Can be set in 50-mm increments)	50-450mm	250-400mm
Axis 2	HH type: 400mm/s HM type: 350mm/s	High-speed type: 600mm/s Medium-speed type: 300mm/s
Motor size	42-square pulse motor	
Ball screw lead	High-speed type: 12mm	High-speed type: 12mm Medium-speed type: 6mm
Drive method	Ball screw, ø10 mm, rolled, C10	
Positioning repeatability	±0.02mm	
Base material	Dedicated alloy steel	Aluminum
Surrounding air temperature/humidity	0 to 40°C, 85% RH or below (non-condensing)	

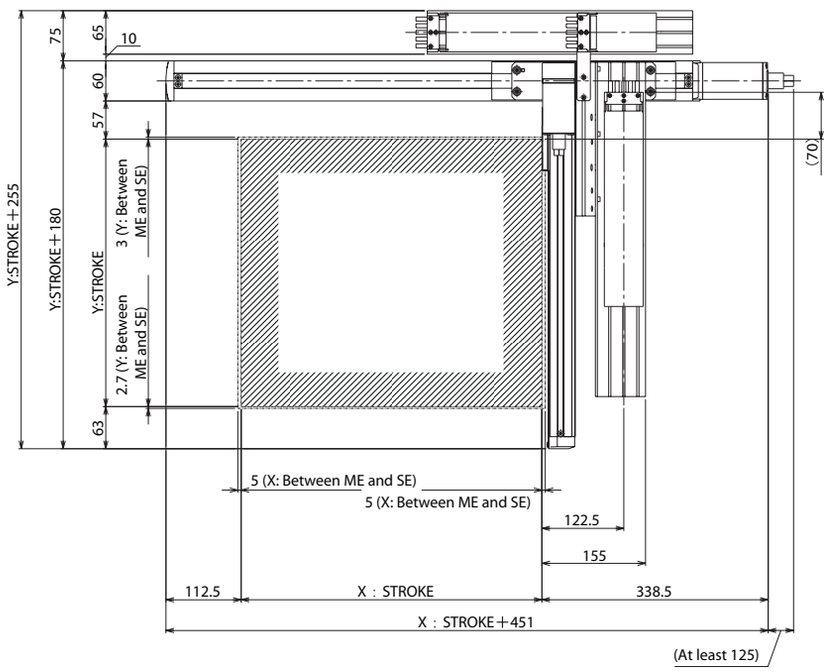
Dimensions

You can download CAD drawings from our website. www.robocylinder.de

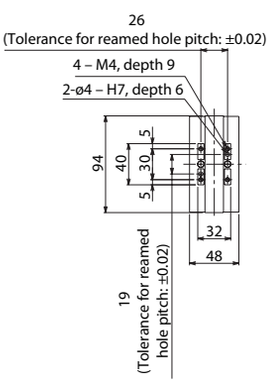
2D CAD

Note 1. The connected position shown in the drawing defines the home.
Note 2. Both wiring 1 and wiring 2 assume use of a cable track.
Note 3. For details on the cable track, refer to P. 90.
Note 4. For details on the bracket on the moving end of the cable track, refer to P. 90.

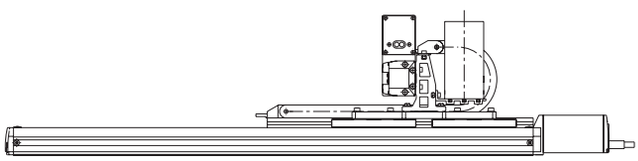




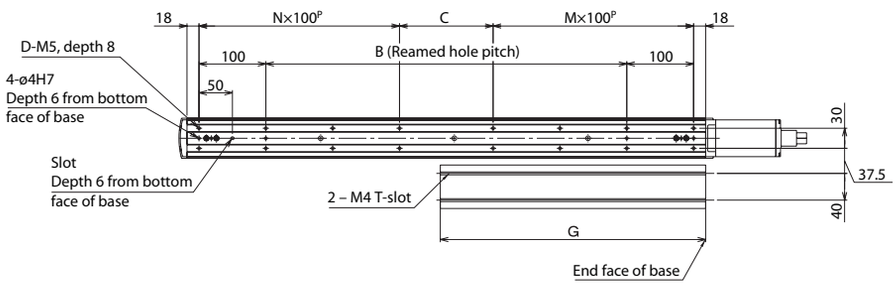
ME: Mechanical end
SE: Stroke end



Detail view of Y-axis slider



Detail view of slot in bottom face of X-axis base



Detail view of X-axis installation

Dimensions by Stroke

X: Nominal stroke	200	250	300	350	400	450	500	550	600
X: Effective stroke	50	100	150	200	250	300	350	400	450
B	140	190	240	290	340	390	440	490	540
C	140	190	40	90	140	190	40	90	140
D	8	8	12	12	12	12	16	16	16
M	1	1	2	2	2	2	3	3	3
N	1	1	2	2	2	2	3	3	3
G	197	222	247	272	297	322	347	372	397

Controllers

Applicable controller

Refer to P. 90 for the controllers.

IK2-PXBC1□□S

RCP2 2-axis Combinations X axis: SS7R (Reversed, Single-slider)
Y axis: SA5R (Reversed)

Model Details

Series — Type — Encoder type — Axis 1 (X axis) — Axis 2 (Y axis) — Controllers — Cable — Shipping configuration

IK2 — **PXBC1□□S** — □ — □ □ — □ □ — **P1** — □ — □ — □ — □

Combination directions
1-2

Differences between Single-slider and Double-slider Types
HH: X high-speed, Y high-speed
HM: X high-speed, Y medium-speed

Encoder type
I: Incremental

Stroke (mm)
5: 50mm
≀
(Can be set in 50-mm increments)

Options
NM: Opposite-home specification
SR: Slider roller specification

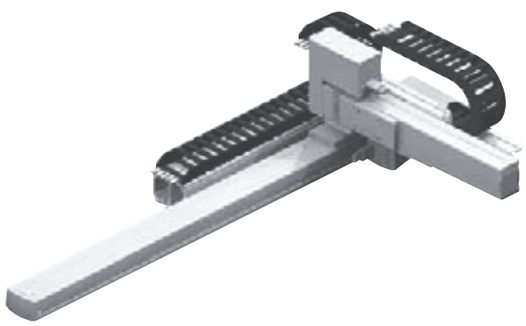
Cable length
1L: 1m
3L: 3m
5L: 5m
□L: □m

Wiring 1
N: Cable only
CT: With cable track

Wiring 2

Shipping configuration
K: Individual components (kit)
A: Assembled

* Refer to P. 10 for details on the items comprising the model name.



Both wiring 1 and wiring 2 assume use of a cable track.

Maximum Stroke

X axis 600 mm Y axis 200 mm

Axis 2 (High-speed type)

X axis 400 mm/s Y axis 600 mm/s

Maximum Load Capacity

Y-axis stroke	X high-speed, Y high-speed	X high-speed, Y medium-speed
50mm	4.5kg	9.0kg
100mm	4.5kg	9.0kg
150mm	4.0kg	8.0kg
200mm	3.0kg	6.0kg

Cable Length

Type	Cable code	Length
Standard type	**1L**	1m
	3L	3m
	5L	5m

* Axis 1 comes with a standard cable, while axis 2 comes with a robot cable.
** Cable length of second axis is defined by the length outside of cable track.
If CT option is not choosed, longer cable is provided.
*** Refer to P. 89 for lengths other than those specified above.

Cable track

Wiring 1 (Next to X-axis)	X-axis stroke	50-300	350-600
			-
Wiring 2 (Next to Y-axis)	Y-axis stroke	50-200	–
			–

Options

Name	Option code	
Opposite-home specification	**NM**	
Slider roller specification	**SR**	Axis 1 (X-axis) Axis 2 (Y-axis)

Specifications

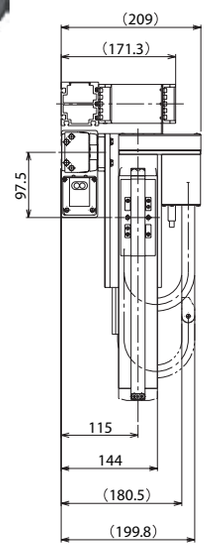
Item	X axis	Y axis
Axis model	RCP2-SS7R	RCP2-SA6R
Stroke (Can be set in 50-mm increments)	50-600mm	50-200mm
Axis 2	HH type: 400mm/s HM type: 250mm/s	High-speed type: 600mm/s Medium-speed type: 300mm/s
Motor size	42-square pulse motor	
Ball screw lead	High-speed type: 12mm	High-speed type: 12mm Medium-speed type: 6mm
Drive method	Ball screw, ø10 mm, rolled, C10	
Positioning repeatability	±0.02mm	
Base material	Dedicated alloy steel	Aluminum
Surrounding air temperature/humidity	0 to 40°C, 85% RH or below (non-condensing)	

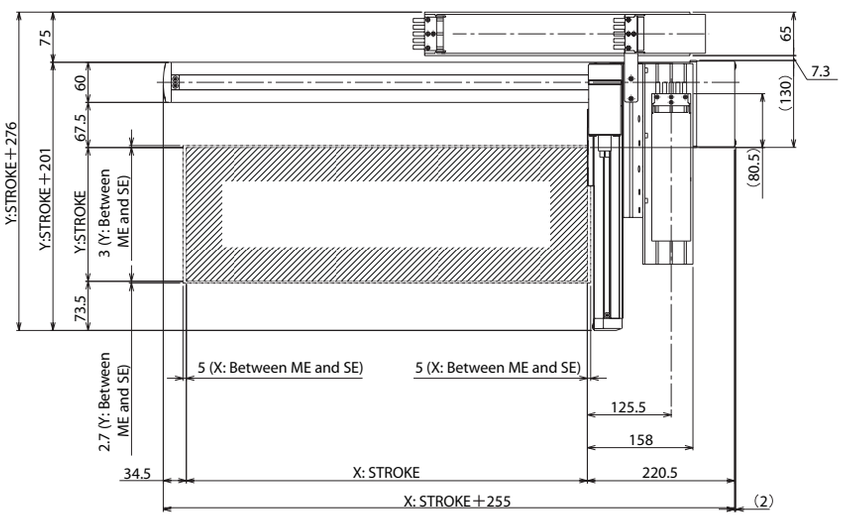
Dimensions

You can download CAD drawings from our website. www.robocylinder.de

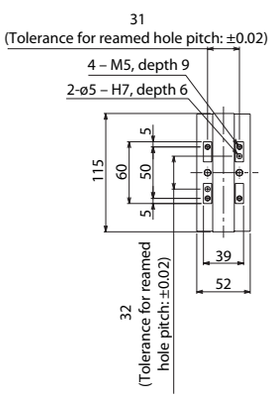
Note 1. The connected position shown in the drawing defines the home.
Note 2. Both wiring 1 and wiring 2 assume use of a cable track.
Note 3. For details on the cable track, refer to P. 90.
Note 4. For details on the bracket on the moving end of the cable track, refer to P. 90.

2D CAD

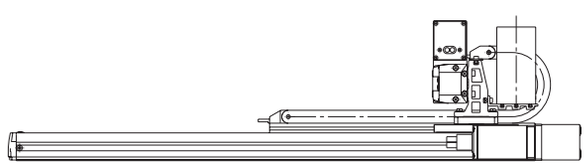


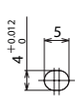


ME: Mechanical end
SE: Stroke end

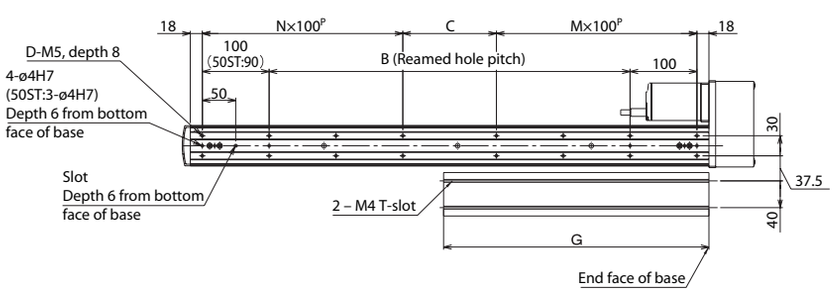


Detail view of Y-axis slider





Detail view of slot in bottom face of X-axis base



Detail view of X-axis installation

■Dimensions by Stroke

X: Model	50	100	150	200	250	300	350	400	450	500	550	600
B	0	40	90	140	190	240	290	340	390	440	490	540
C	90	40	90	140	190	40	90	140	190	40	90	140
D	6	8	8	8	8	12	12	12	12	16	16	16
M	1	1	1	1	1	2	2	2	2	3	3	3
N	0	1	1	1	1	2	2	2	2	3	3	3
G	122	147	172	197	222	247	272	297	322	347	372	397

Controllers

Applicable controller

Refer to P. 90 for the controllers.

IK2-PXBC1□□D

RCP2 2-axis Combinations X axis: SS7R (Reversed, Double-slider)
Y axis: SA5R (Reversed)

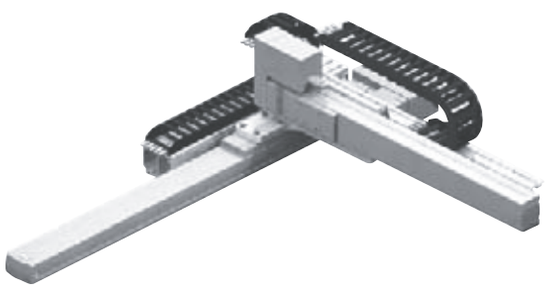
Model Details

Series — Type — Encoder type — Axis 1 (X axis) — Axis 2 (Y axis) — Controllers — Cable — Shipping configuration

IK2 — PXBC1□□D — □ — □ □ — □ □ — P1 — □ — □ — □ — □

- **Combination directions**: 1-2
- **Differences between Single-slider and Double-slider Types**: HH: X high-speed, Y high-speed; HM: X high-speed, Y medium-speed
- **Encoder type**: I: Incremental
- **Stroke (mm)**: 5: 50mm ~ (Can be set in 50-mm increments)
- **Options**: NM: Opposite-home specification; SR: Slider roller specification
- **Cable length**: 1L: 1m; 3L: 3m; 5L: 5m; □L: □m
- **Wiring 1**: N: Cable only; CT: With cable track
- **Wiring 2**
- **Shipping configuration**: K: Individual components (kit); A: Assembled

* Refer to P. 10 for details on the items comprising the model name.



Both wiring 1 and wiring 2 assume use of a cable track.

Maximum Stroke

X axis 450 mm — Y axis 400 mm

Axis 2 (High-speed type)

X axis 400 mm/s — Y axis 600 mm/s

Maximum Load Capacity

Y-axis stroke	X high-speed, Y high-speed	X high-speed, Y medium-speed
250mm	3.0kg	6.0kg
300mm	3.0kg	6.0kg
350mm	3.0kg	6.0kg
400mm	3.0kg	6.0kg

Cable Length

Type	Cable code	Length
Standard type	**1L**	1m
	3L	3m
	5L	5m

* Axis 1 comes with a standard cable, while axis 2 comes with a robot cable.
** Cable length of second axis is defined by the length outside of cable track.
If CT option is not choosed, longer cable is provided.
*** Refer to P. 89 for lengths other than those specified above.

Cable track

Wiring 1 (Next to X-axis)	X-axis stroke	50-300	350-450
			-
Wiring 2 (Next to Y-axis)	Y-axis stroke	250-400	–
			–

Options

Name	Option code	
Opposite-home specification	**NM**	
Slider roller specification	**SR**	Axis 1 (X-axis) Axis 2 (Y-axis)

Specifications

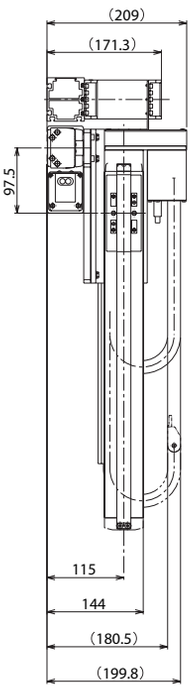
Item	X axis	Y axis
Axis model	RCP2-SS7R	RCP2-SA6R
Stroke (Can be set in 50-mm increments)	50-450mm	250-400mm
Axis 2	HH type: 400mm/s HM type: 250mm/s	High-speed type: 600mm/s Medium-speed type: 300mm/s
Motor size	42-square pulse motor	
Ball screw lead	High-speed type: 12mm	High-speed type: 12mm Medium-speed type: 6mm
Drive method	Ball screw, ø10 mm, rolled, C10	
Positioning repeatability	±0.02mm	
Base material	Dedicated alloy steel	Aluminum
Surrounding air temperature/humidity	0 to 40°C, 85% RH or below (non-condensing)	

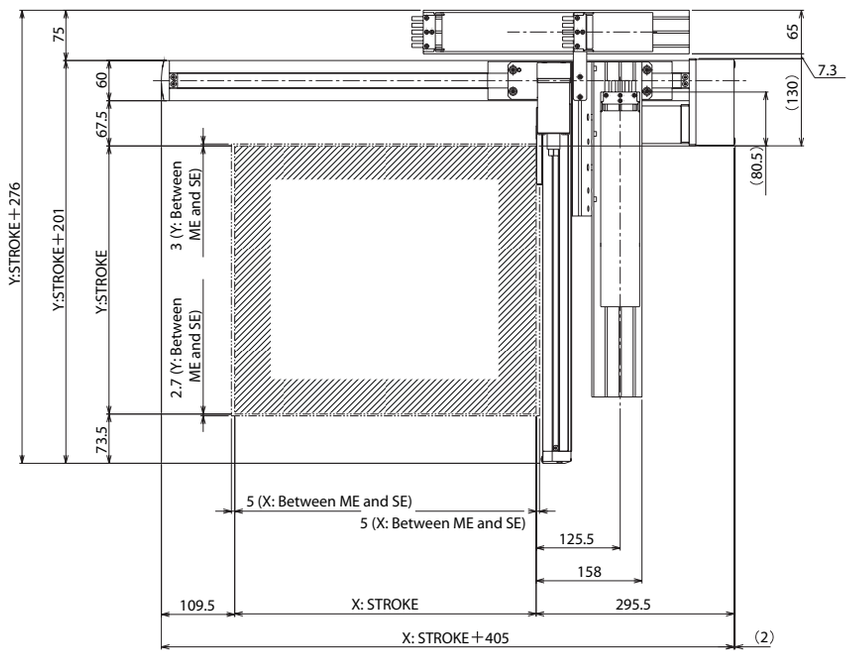
Dimensions

You can download CAD drawings from our website. www.robocylinder.de

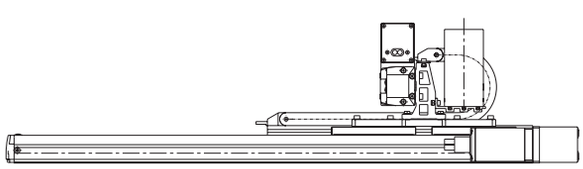
2D CAD

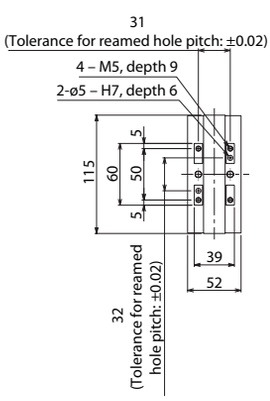
Note 1. The connected position shown in the drawing defines the home.
Note 2. Both wiring 1 and wiring 2 assume use of a cable track.
Note 3. For details on the cable track, refer to P. 90.
Note 4. For details on the bracket on the moving end of the cable track, refer to P. 90.



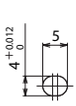


ME: Mechanical end
SE: Stroke end

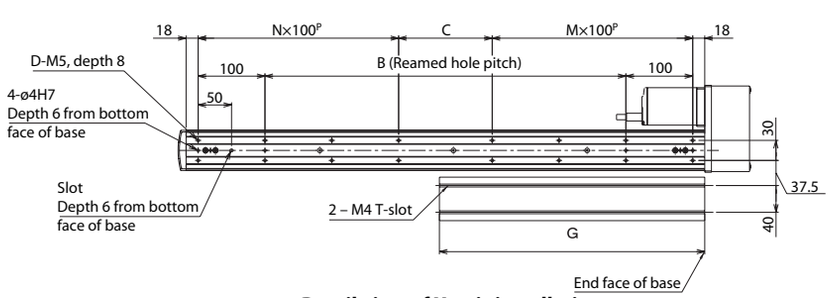




Detail view of Y-axis slider



Detail view of slot in bottom face of X-axis base



Detail view of X-axis installation

Dimensions by Stroke

X: Nominal stroke	200	250	300	350	400	450	500	550	600
X: Effective stroke	50	100	150	200	250	300	350	400	450
B	140	190	240	290	340	390	440	490	540
C	140	190	40	90	140	190	40	90	140
D	8	8	12	12	12	12	16	16	16
M	1	1	2	2	2	2	3	3	3
N	1	1	2	2	2	2	3	3	3
G	197	222	247	272	297	322	347	372	397

Controllers

Applicable controller

Refer to P. 90 for the controllers.

IK2-PXBC2□□S

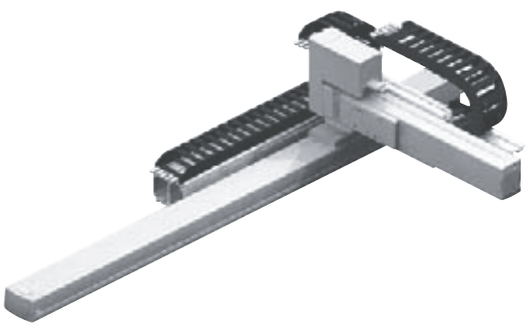
RCP2 2-axis Combinations X axis: SS7C (Straight, Single-slider)
Y axis: SA6R (Reversed)

Model Details

Series	Type	Encoder type	Axis 1 (X axis)		Axis 2 (Y axis)		Controllers	Cable			Shipping configuration
IK2	PXBC2□□S	□	□	□	□	□	P1	□	□	□	□

- **Combination directions**: 1-4
- **Differences between Single-slider and Double-slider Types**: HH: X high-speed, Y high-speed; HM: X high-speed, Y medium-speed
- **Encoder type**: I: Incremental
- **Stroke (mm)**: 5: 50mm ~ (Can be set in 50-mm increments)
- **Options**: NM: Opposite-home specification; SR: Slider roller specification
- **Cable length**: 1L: 1m; 3L: 3m; 5L: 5m; □L: □m
- **Wiring 1**: N: Cable only; CT: With cable track
- **Wiring 2**
- **Shipping configuration**: K: Individual components (kit); A: Assembled

* Refer to P. 10 for details on the items comprising the model name.



Both wiring 1 and wiring 2 assume use of a cable track.

Maximum Stroke

X axis 600 mm Y axis 200 mm

Axis 2 (High-speed type)

X axis 400 mm/s Y axis 600 mm/s

Maximum Load Capacity

Y-axis stroke	X high-speed, Y high-speed	X high-speed, Y medium-speed
50mm	4.5kg	9.0kg
100mm	4.5kg	9.0kg
150mm	4.0kg	8.0kg
200mm	3.0kg	6.0kg

Cable Length

Type	Cable code	Length
Standard type	**1L**	1m
	3L	3m
	5L	5m

* Axis 1 comes with a standard cable, while axis 2 comes with a robot cable.
** Cable length of second axis is defined by the length outside of cable track.
If CT option is not choosed, longer cable is provided.
*** Refer to P. 89 for lengths other than those specified above.

Cable track

Wiring 1 (Next to X-axis)	X-axis stroke	50-300	350-600
			-
Wiring 2 (Next to Y-axis)	Y-axis stroke	50-200	–
			–

Options

Name	Option code	
Opposite-home specification	**NM**	
Slider roller specification	**SR**	Axis 1 (X-axis) Axis 2 (Y-axis)

Specifications

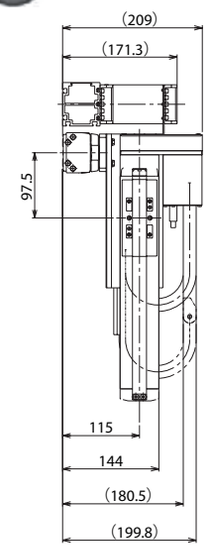
Item	X axis	Y axis
Axis model	RCP2-SS7C	RCP2-SA6R
Stroke (Can be set in 50-mm increments)	50-600mm	50-200mm
Axis 2	HH type: 400mm/s HM type: 250mm/s	High-speed type: 600mm/s Medium-speed type: 300mm/s
Motor size	42-square pulse motor	
Ball screw lead	High-speed type: 12mm	High-speed type: 12mm Medium-speed type: 6mm
Drive method	Ball screw, ø10 mm, rolled, C10	
Positioning repeatability	±0.02mm	
Base material	Dedicated alloy steel	Aluminum
Surrounding air temperature/humidity	0 to 40°C, 85% RH or below (non-condensing)	

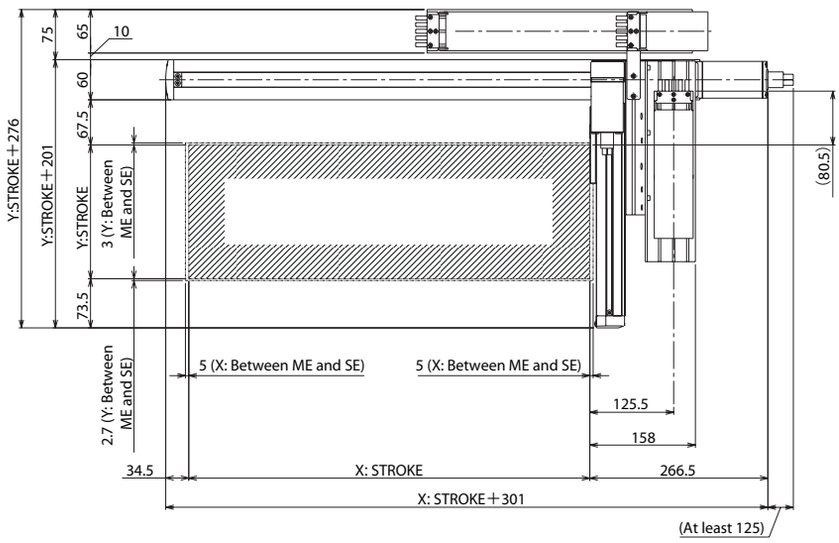
Dimensions

You can download CAD drawings from our website. www.robocylinder.de

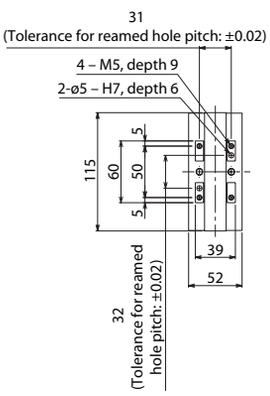
2D CAD

Note 1. The connected position shown in the drawing defines the home.
Note 2. Both wiring 1 and wiring 2 assume use of a cable track.
Note 3. For details on the cable track, refer to P. 90.
Note 4. For details on the bracket on the moving end of the cable track, refer to P. 90.

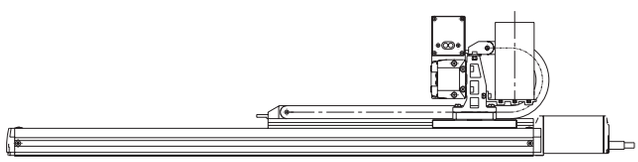




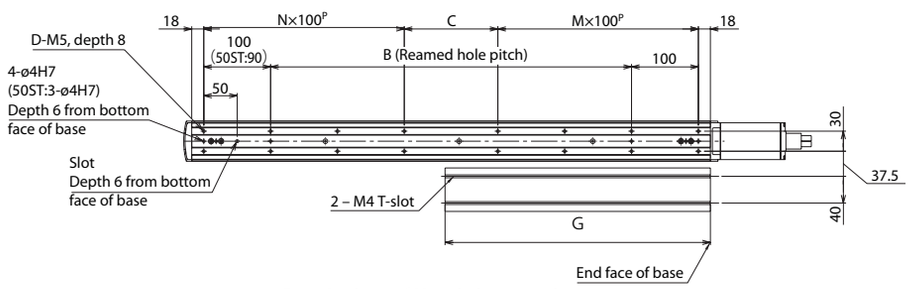
ME: Mechanical end
SE: Stroke end



Detail view of Y-axis slider



Detail view of slot in bottom face of X-axis base



Detail view of X-axis installation

■Dimensions by Stroke

X: Model	50	100	150	200	250	300	350	400	450	500	550	600
B	0	40	90	140	190	240	290	340	390	440	490	540
C	90	40	90	140	190	40	90	140	190	40	90	140
D	6	8	8	8	8	12	12	12	12	16	16	16
M	1	1	1	1	1	2	2	2	2	3	3	3
N	0	1	1	1	1	2	2	2	2	3	3	3
G	122	147	172	197	222	247	272	297	322	347	372	397

Controllers

Applicable controller

Refer to P. 90 for the controllers.

IK2-PXBC2□□D

RCP2 2-axis Combinations X axis: SS7C (Straight, Double-slider)
Y axis: SA6R (Reversed)

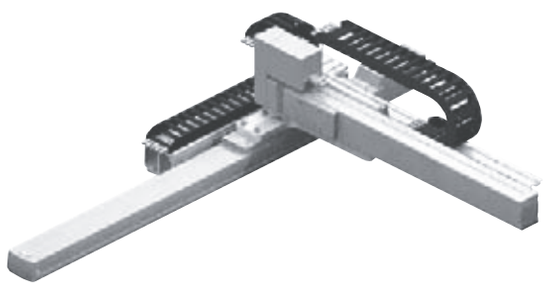
Model Details

Series — Type — Encoder type — Axis 1 (X axis) — Axis 2 (Y axis) — Controllers — Cable — Shipping configuration

IK2 — PXBC2□□D — □ — □ — □ — □ — □ — P1 — □ — □ — □ — □

- **Combination directions** 1-4
- **Differences between Single-slider and Double-slider Types** HH: X high-speed, Y high-speed / HM: X high-speed, Y medium-speed
- **Encoder type** I: Incremental
- **Stroke (mm)** 5: 50mm ~ (Can be set in 50-mm increments)
- **Options** NM: Opposite-home specification / SR: Slider roller specification
- **Cable length** 1L: 1m / 3L: 3m / 5L: 5m / □L: □m
- **Wiring 1** N: Cable only / CT: With cable track
- **Wiring 2**
- **Shipping configuration** K: Individual components (kit) / A: Assembled

* Refer to P. 10 for details on the items comprising the model name.



Both wiring 1 and wiring 2 assume use of a cable track.

Maximum Stroke

X axis 450 mm — Y axis 400 mm

Axis 2 (High-speed type)

X axis 400 mm/s — Y axis 600 mm/s

Maximum Load Capacity

Y-axis stroke	X high-speed, Y high-speed	X high-speed, Y medium-speed
250mm	3.0kg	6.0kg
300mm	3.0kg	6.0kg
350mm	3.0kg	6.0kg
400mm	3.0kg	6.0kg

Cable Length

Type	Cable code	Length
Standard type	**1L**	1m
	3L	3m
	5L	5m

* Axis 1 comes with a standard cable, while axis 2 comes with a robot cable.
** Cable length of second axis is defined by the length outside of cable track. If CT option is not choosed, longer cable is provided.
*** Refer to P. 89 for lengths other than those specified above.

Cable track

Wiring 1 (Next to X-axis)	X-axis stroke	50-300	350-450
			-
Wiring 2 (Next to Y-axis)	Y-axis stroke	250-400	–
			–

Options

Name	Option code	
Opposite-home specification	**NM**	
Slider roller specification	**SR**	Axis 1 (X-axis) Axis 2 (Y-axis)

Specifications

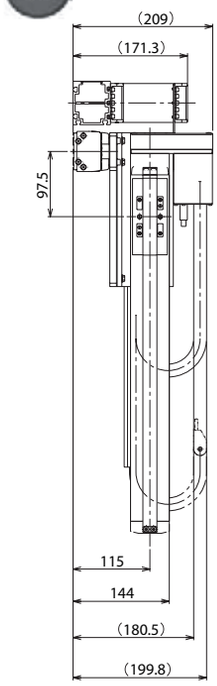
Item	X axis	Y axis
Axis model	RCP2-SS7C	RCP2-SA6R
Stroke (Can be set in 50-mm increments)	50-450mm	250-400mm
Axis 2	HH type: 400mm/s HM type: 250mm/s	High-speed type: 600mm/s Medium-speed type: 300mm/s
Motor size	42-square pulse motor	
Ball screw lead	High-speed type: 12mm	High-speed type: 12mm Medium-speed type: 6mm
Drive method	Ball screw, ø10 mm, rolled, C10	
Positioning repeatability	±0.02mm	
Base material	Dedicated alloy steel	Aluminum
Surrounding air temperature/humidity	0 to 40°C, 85% RH or below (non-condensing)	

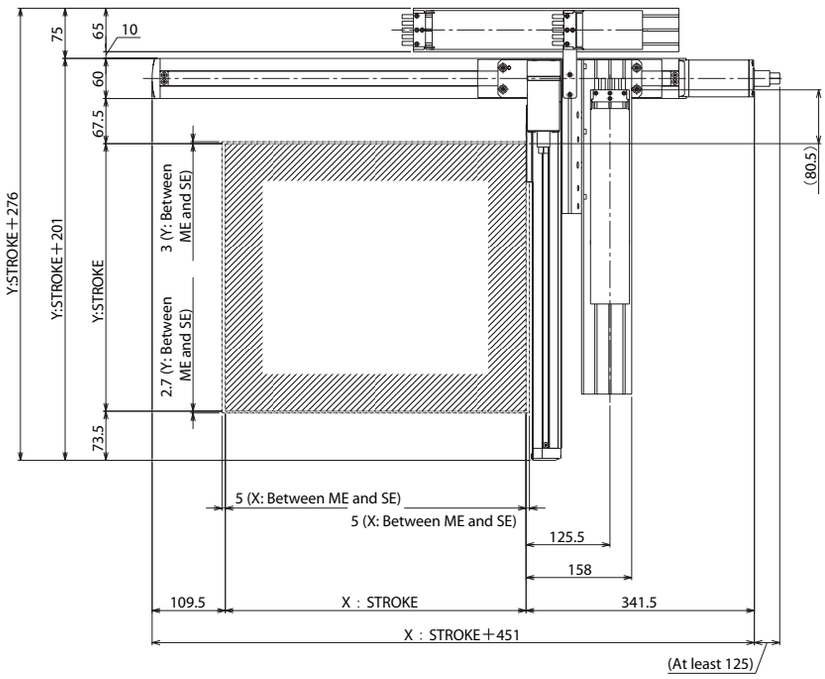
Dimensions

You can download CAD drawings from our website. www.robocylinder.de

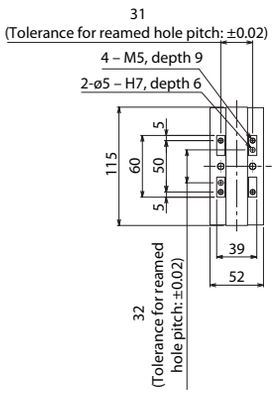
2D CAD

Note 1. The connected position shown in the drawing defines the home.
Note 2. Both wiring 1 and wiring 2 assume use of a cable track.
Note 3. For details on the cable track, refer to P. 90.
Note 4. For details on the bracket on the moving end of the cable track, refer to P. 90.

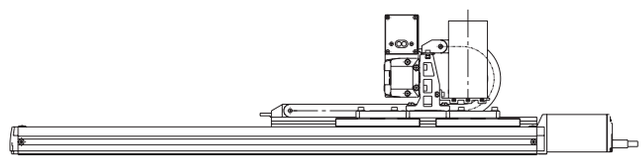


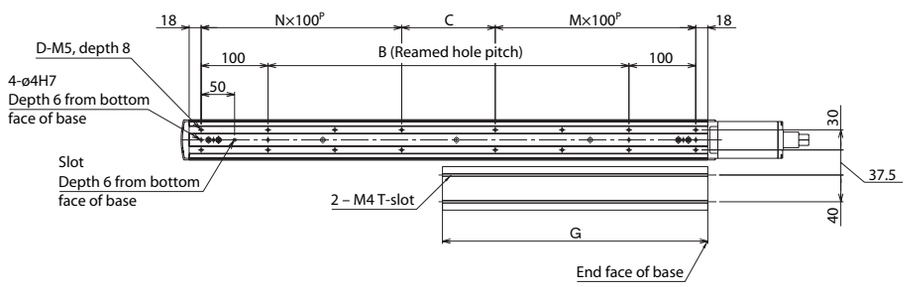


ME: Mechanical end
SE: Stroke end



Detail view of Y-axis slider





Detail view of X-axis installation

Detail view of slot in bottom face of X-axis base

■Dimensions by Stroke

X: Nominal stroke	200	250	300	350	400	450	500	550	600
X: Effective stroke	50	100	150	200	250	300	350	400	450
B	140	190	240	290	340	390	440	490	540
C	140	190	40	90	140	190	40	90	140
D	8	8	12	12	12	12	16	16	16
M	1	1	2	2	2	2	3	3	3
N	1	1	2	2	2	2	3	3	3
G	197	222	247	272	297	322	347	372	397

Controllers

Applicable controller

Refer to P. 90 for the controllers.

IK2-PXBB1□□S

RCP2 2-axis Combinations X axis: SS8R (Reversed, Single-slider)
Y axis: SA7R (Reversed)

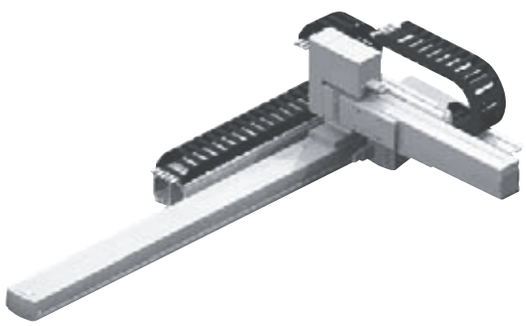
Model Details

Series — Type — Encoder type — Axis 1 (X axis) — Axis 2 (Y axis) — Controllers — Cable — Shipping configuration

IK2 — PXBB1□□S — □ — □ □ — □ □ — P1 — □ — □ — □ — □

- **Combination directions** 1-2
- **Differences between Single-slider and Double-slider Types** HH: X high-speed, Y high-speed; MM: X medium-speed, Y medium-speed
- **Encoder type** I: Incremental
- **Stroke (mm)** 5: 50mm ~ (Can be set in 50-mm increments)
- **Options** NM: Opposite-home specification; SR: Slider roller specification
- **Cable length** 1L: 1m; 3L: 3m; 5L: 5m; □L: □m
- **Wiring 1** N: Cable only; CT: With cable track
- **Wiring 2**
- **Shipping configuration** K: Individual components (kit); A: Assembled

* Refer to P. 10 for details on the items comprising the model name.



Both wiring 1 and wiring 2 assume use of a cable track.

Maximum Stroke

X axis 1000 mm　Y axis 300 mm

Axis 2 (High-speed type)

X axis 250 mm/s　Y axis 450 mm/s

Maximum Load Capacity

Y-axis stroke	X high-speed, Y high-speed	X medium-speed, Y medium-speed
50mm	8.0kg	16kg
100mm	8.0kg	16kg
150mm	7.0kg	15kg
200mm	7.0kg	12.5kg
250mm	6.0kg	9.0kg
300mm	6.0kg	8.0kg

Cable Length

Type	Cable code	Length
Standard type	**1L**	1m
	3L	3m
	5L	5m

* Axis 1 comes with a standard cable, while axis 2 comes with a robot cable.
** Cable length of second axis is defined by the length outside of cable track. If CT option is not choosed, longer cable is provided.
*** Refer to P. 89 for lengths other than those specified above.

Cable track

Wiring 1 (Next to X-axis)	X-axis stroke	50-300	350-600	650-900	950-1000
Wiring 2 (Next to Y-axis)	Y-axis stroke	50-200	250-300	–	–
				–	–

Options

Name	Option code	
Opposite-home specification	**NM**	
Slider roller specification	**SR**	Axis 1 (X-axis) Axis 2 (Y-axis)

Specifications

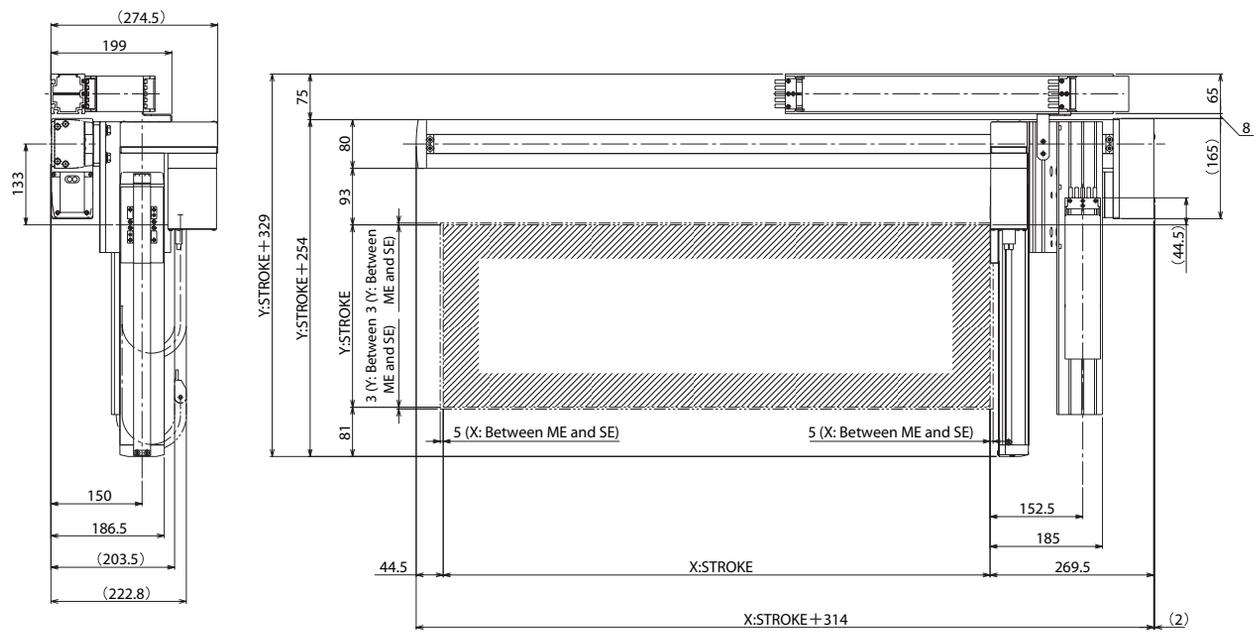
Item	X axis	Y axis
Axis model	RCP2-SS8R	RCP2-SA7R
Stroke (Can be set in 50-mm increments)	50-1000mm	50-300mm
Axis 2	High-speed type: 250mm/s Medium-speed type: 125mm/s	High-speed type: 450mm/s Medium-speed type: 220mm/s
Motor size	56-square pulse motor	
Ball screw lead	High-speed type: 20mm Medium-speed type: 10mm	High-speed type: 16mm Medium-speed type: 8mm
Drive method	Ball screw, ø16mm, rolled, C10	Ball screw, ø12mm, rolled, C10
Positioning repeatability	±0.02mm	
Base material	Dedicated alloy steel	Aluminum
Surrounding air temperature/humidity	0 to 40°C, 85% RH or below (non-condensing)	

Dimensions

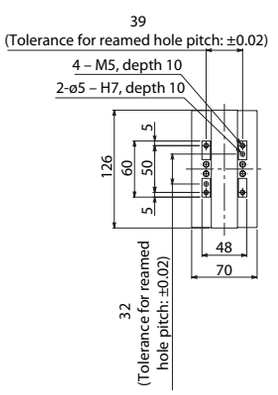
You can download CAD drawings from our website. www.robocylinder.de

2D CAD

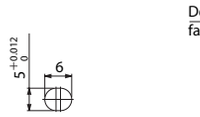
Note 1. The connected position shown in the drawing defines the home.
Note 2. Both wiring 1 and wiring 2 assume use of a cable track.
Note 3. For details on the cable track, refer to P. 90.
Note 4. For details on the bracket on the moving end of the cable track, refer to P. 90.



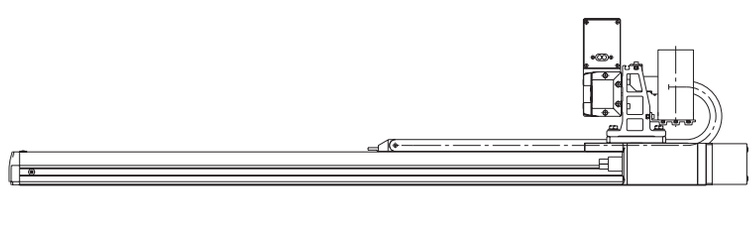
ME: Mechanical end
SE: Stroke end

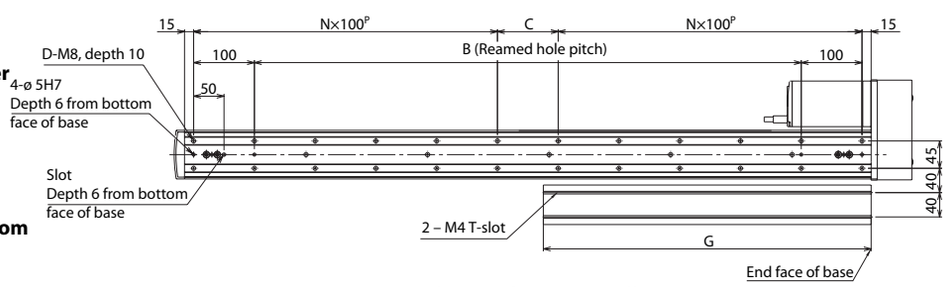


Detail view of Y-axis slider



Detail view of slot in bottom face of X-axis base





Detail view of X-axis installation

■Dimensions by Stroke

X: Model	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
B	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
C	50	100	150	0	50	100	150	0	50	100	150	0	50	100	150	0	50	100	150	0
D	8	8	8	10	12	12	12	14	16	16	16	18	20	20	20	22	24	24	24	26
N	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6
G	114.5	139.5	164.5	189.5	214.5	239.5	264.5	289.5	314.5	339.5	364.5	389.5	414.5	439.5	464.5	489.5	514.5	539.5	564.5	589.5

Controllers

Applicable controller

Refer to P. 90 for the controllers.

IK2-PXBB1□□D

RCP2 2-axis Combinations X axis: SS8R (Reversed, Double-slider)
Y axis: SA7R (Reversed)

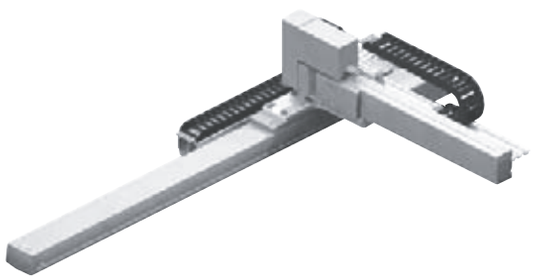
Model Details

Series — Type — Encoder type — Axis 1 (X axis) — Axis 2 (Y axis) — Controllers — Cable — Shipping configuration

IK2 — PXBB1□□D — □ — □ □ — □ □ — P1 — □ — □ — □ — □

- **Combination directions** 1-2
- **Differences between Single-slider and Double-slider Types** HH: X high-speed, Y high-speed; MM: X medium-speed, Y medium-speed
- **Encoder type** I: Incremental
- **Stroke (mm)** 5: 50mm ~ (Can be set in 50-mm increments)
- **Options** NM: Opposite-home specification; SR: Slider roller specification
- **Cable length** 1L: 1m; 3L: 3m; 5L: 5m; □L: □m
- **Wiring 1** N: Cable only; CT: With cable track
- **Wiring 2**
- **Shipping configuration** K: Individual components (kit); A: Assembled

* Refer to P. 10 for details on the items comprising the model name.



Both wiring 1 and wiring 2 assume use of a cable track.

Maximum Stroke

X axis 800 mm Y axis 400 mm

Axis 2 (High-speed type)

X axis 250 mm/s Y axis 450 mm/s

Maximum Load Capacity

Y-axis stroke	X high-speed, Y high-speed	X medium-speed, Y medium-speed
200mm	–	15kg
250mm	–	12.5kg
300mm	–	12.5kg
350mm	6.0kg	12kg
400mm	5.5kg	10.5kg

Note: For the X high-speed/Y high-speed type, the Y-axis stroke must be 350 mm or more.

Cable Length

Type	Cable code	Length
Standard type	**1L**	1m
	3L	3m
	5L	5m

* Axis 1 comes with a standard cable, while axis 2 comes with a robot cable.
** Cable length of second axis is defined by the length outside of cable track. If CT option is not choosed, longer cable is provided.
*** Refer to P. 89 for lengths other than those specified above.

Cable track

Wiring 1 (Next to X-axis)	X-axis stroke	50-300	350-600	650-800
Wiring 2 (Next to Y-axis)	Y-axis stroke	200	250-400	–
				–

Options

Name	Option code	
Opposite-home specification	**NM**	
Slider roller specification	**SR**	Axis 1 (X-axis) Axis 2 (Y-axis)

Specifications

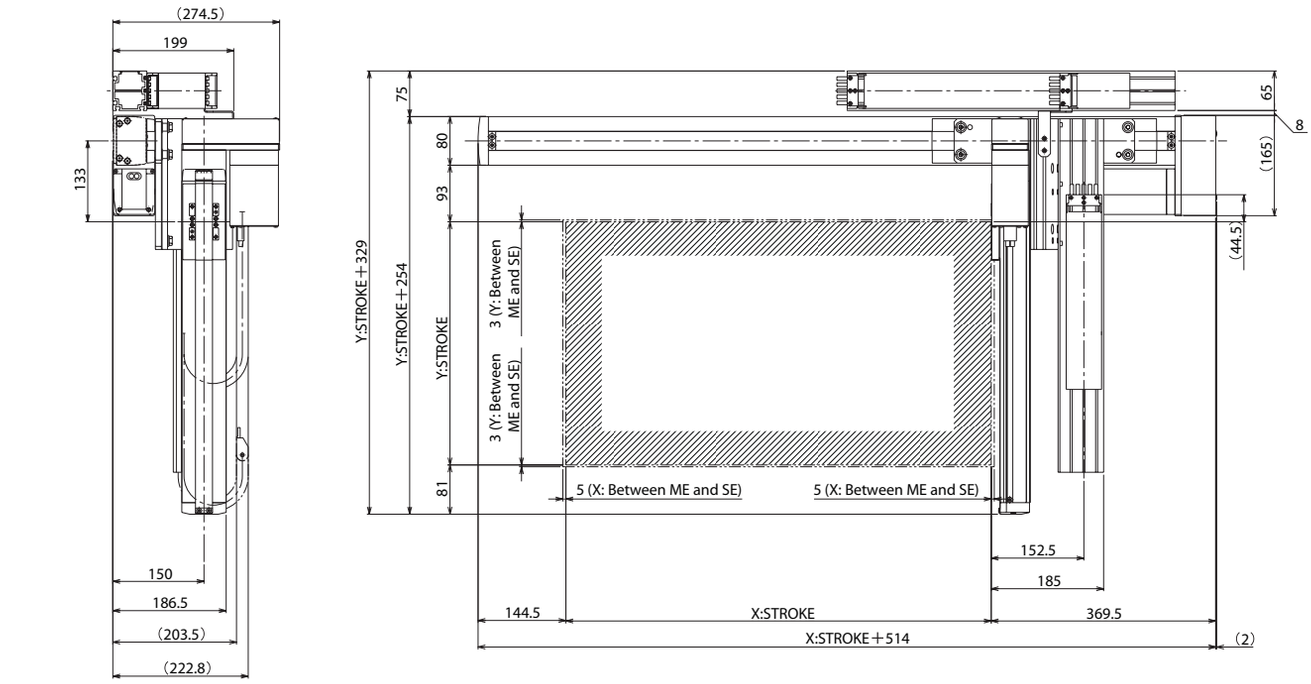
Item	X axis	Y axis
Axis model	RCP2-SS8R	RCP2-SA7R
Stroke (Can be set in 50-mm increments)	50-800mm	350-400mm
Axis 2	High-speed type: 250mm/s Medium-speed type: 125mm/s	High-speed type: 450mm/s Medium-speed type: 220mm/s
Motor size	56-square pulse motor	
Ball screw lead	High-speed type: 20mm Medium-speed type: 10mm	High-speed type: 16mm Medium-speed type: 8mm
Drive method	Ball screw, ø16mm, rolled, C10	Ball screw, ø12mm, rolled, C10
Positioning repeatability	±0.02mm	
Base material	Dedicated alloy steel	Aluminum
Surrounding air temperature/humidity	0 to 40°C, 85% RH or below (non-condensing)	

Dimensions

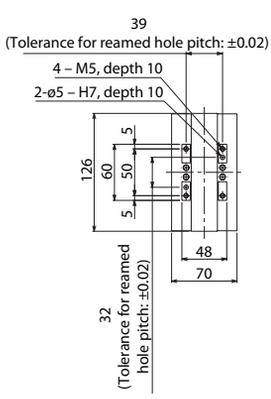
You can download CAD drawings from our website. www.robocylinder.de

2D CAD

Note 1. The connected position shown in the drawing defines the home.
Note 2. Both wiring 1 and wiring 2 assume use of a cable track.
Note 3. For details on the cable track, refer to P. 90.
Note 4. For details on the bracket on the moving end of the cable track, refer to P. 90.

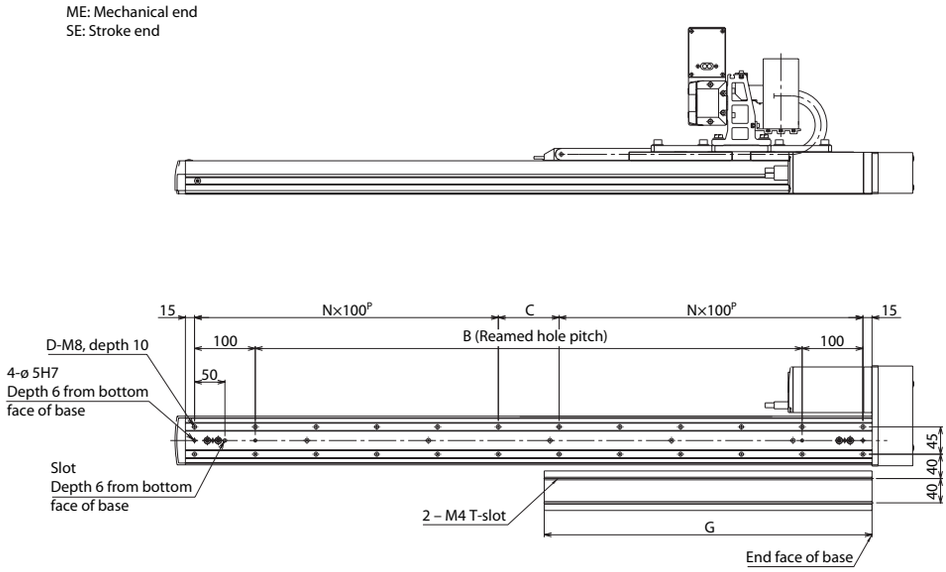


ME: Mechanical end
SE: Stroke end



Detail view of Y-axis slider

Detail view of slot in bottom face of X-axis base



Detail view of X-axis installation

■Dimensions by Stroke

X: Nominal stroke	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
X: Effective stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
B	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
C	50	100	150	0	50	100	150	0	50	100	150	0	50	100	150	0
D	12	12	12	14	16	16	16	18	20	20	20	22	24	24	24	26
N	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6
G	214.5	239.5	264.5	289.5	314.5	339.5	364.5	389.5	414.5	439.5	464.5	489.5	514.5	539.5	564.5	589.5

Controllers

Applicable controller

Refer to P. 90 for the controllers.

IK2-PXBB2□□S

RCP2 2-axis Combinations X axis: SS8C (Straight, Single-slider)
Y axis: SA7R (Reversed)

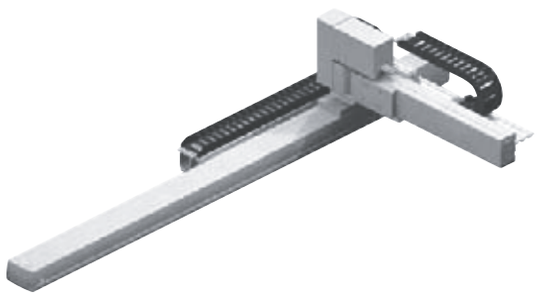
Model Details

Series — Type — Encoder type — Axis 1 (X axis) — Axis 2 (Y axis) — Controllers — Cable — Shipping configuration

IK2 — PXBB2□□S — □ — □ □ — □ □ — P1 — □ — □ — □ — □

- **Combination directions**: 1-4
- **Differences between Single-slider and Double-slider Types**: HH: X high-speed, Y high-speed; MM: X medium-speed, Y medium-speed
- **Encoder type**: I: Incremental
- **Stroke (mm)**: 5: 50mm ~ (Can be set in 50-mm increments)
- **Options**: NM: Opposite-home specification; SR: Slider roller specification
- **Cable length**: 1L: 1m; 3L: 3m; 5L: 5m; □L: □m
- **Wiring 1**: N: Cable only; CT: With cable track
- **Wiring 2**
- **Shipping configuration**: K: Individual components (kit); A: Assembled

* Refer to P. 10 for details on the items comprising the model name.



Both wiring 1 and wiring 2 assume use of a cable track.

Maximum Stroke

X axis 1000 mm — Y axis 300 mm

Axis 2 (High-speed type)

X axis 250 mm/s — Y axis 450 mm/s

Maximum Load Capacity

Y-axis stroke	X high-speed, Y high-speed	X medium-speed, Y medium-speed
50mm	8.0kg	16kg
100mm	8.0kg	16kg
150mm	7.0kg	15kg
200mm	7.0kg	12.5kg
250mm	6.0kg	9.0kg
300mm	6.0kg	8.0kg

Cable Length

Type	Cable code	Length
Standard type	**1L**	1m
	3L	3m
	5L	5m

* Axis 1 comes with a standard cable, while axis 2 comes with a robot cable.
** Cable length of second axis is defined by the length outside of cable track. If CT option is not choosed, longer cable is provided.
*** Refer to P. 89 for lengths other than those specified above.

Cable track

Wiring 1 (Next to X-axis)	X-axis stroke	50-300	350-600	650-900	950-1000
Wiring 2 (Next to Y-axis)	Y-axis stroke	50-200	250-300	–	–
				–	–

Options

Name	Option code	
Opposite-home specification	**NM**	
Slider roller specification	**SR**	Axis 1 (X-axis) Axis 2 (Y-axis)

Specifications

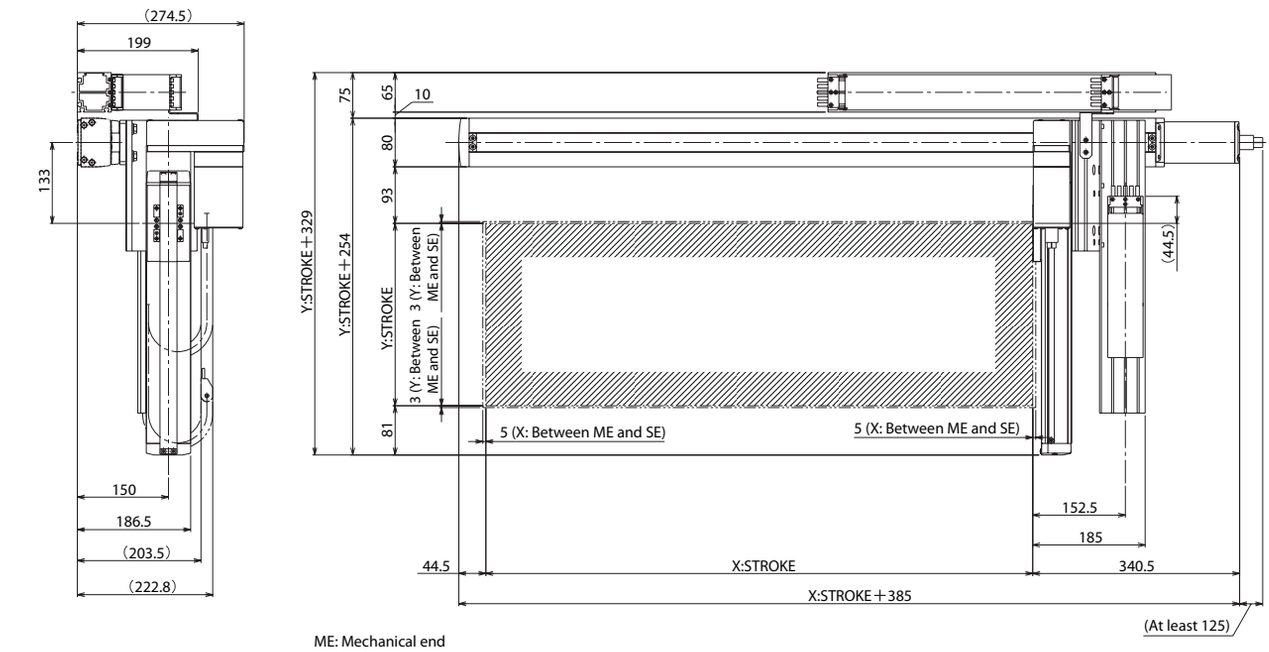
Item	X axis	Y axis
Axis model	RCP2-SS8C	RCP2-SA7R
Stroke (Can be set in 50-mm increments)	50-1000mm	50-300mm
Axis 2	High-speed type: 250mm/s Medium-speed type: 125mm/s	High-speed type: 450mm/s Medium-speed type: 220mm/s
Motor size	56-square pulse motor	
Ball screw lead	High-speed type: 20mm Medium-speed type: 10mm	High-speed type: 16mm Medium-speed type: 8mm
Drive method	Ball screw, ø16mm, rolled, C10	Ball screw, ø12mm, rolled, C10
Positioning repeatability	±0.02mm	
Base material	Dedicated alloy steel	Aluminum
Surrounding air temperature/humidity	0 to 40°C, 85% RH or below (non-condensing)	

Dimensions

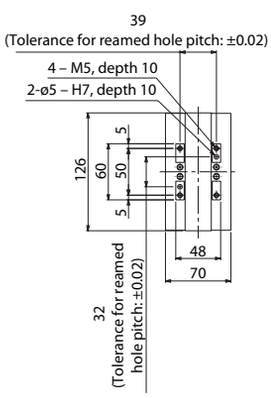
You can download CAD drawings from our website. www.robocylinder.de

2D CAD

Note 1. The connected position shown in the drawing defines the home.
Note 2. Both wiring 1 and wiring 2 assume use of a cable track.
Note 3. For details on the cable track, refer to P. 90.
Note 4. For details on the bracket on the moving end of the cable track, refer to P. 90.

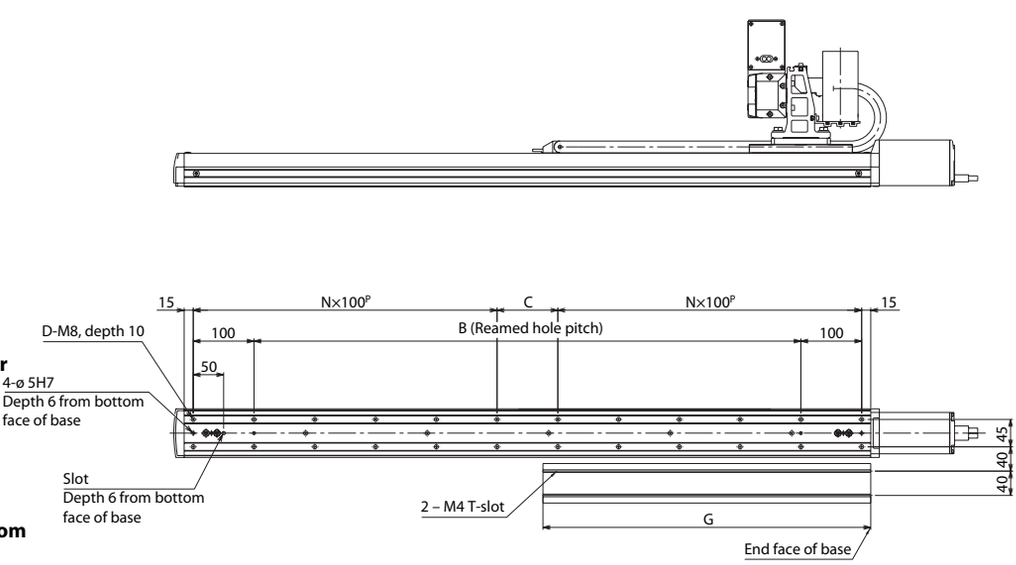


ME: Mechanical end
SE: Stroke end



Detail view of Y-axis slider

Detail view of slot in bottom face of X-axis base



Detail view of X-axis installation

■Dimensions by Stroke

X: Model	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
B	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
C	50	100	150	0	50	100	150	0	50	100	150	0	50	100	150	0	50	100	150	0
D	8	8	8	10	12	12	12	14	16	16	16	18	20	20	20	22	24	24	24	26
N	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6
G	114.5	139.5	164.5	189.5	214.5	239.5	264.5	289.5	314.5	339.5	364.5	389.5	414.5	439.5	464.5	489.5	514.5	539.5	564.5	589.5

Controllers

Applicable controller

Refer to P. 90 for the controllers.

IK2-PXBB2□□D

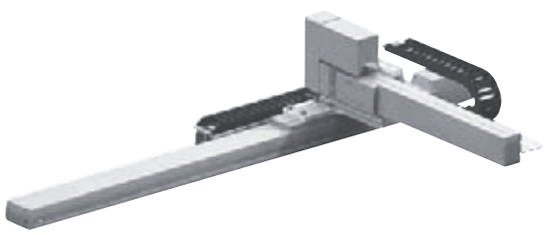
RCP2 2-axis Combinations X axis: SS8C (Straight, Double-slider)
Y axis: SA7R (Reversed)

Model Details

Series	Type	Encoder type	Axis 1 (X axis)		Axis 2 (Y axis)		Controllers	Cable			Shipping configuration
IK2	PXBB2□□D	□	□	□	□	□	P1	□	□	□	□

- Type — Combination directions: 1-4; Differences between Single-slider and Double-slider Types: HH: X high-speed, Y high-speed; MM: X medium-speed, Y medium-speed
- Encoder type: I: Incremental
- Axis 1 (X axis) / Axis 2 (Y axis) — Stroke (mm): 5: 50mm ~ (Can be set in 50-mm increments); Options: NM: Opposite-home specification; SR: Slider roller specification
- Cable — Cable length: 1L: 1m, 3L: 3m, 5L: 5m, □L: □m; Wiring 1: N: Cable only, CT: With cable track; Wiring 2
- Shipping configuration: K: Individual components (kit), A: Assembled

* Refer to P. 10 for details on the items comprising the model name.



Both wiring 1 and wiring 2 assume use of a cable track.

Maximum Stroke

X axis 800 mm　　Y axis 400 mm

Axis 2 (High-speed type)

X axis 250 mm/s　　Y axis 450 mm/s

Maximum Load Capacity

Y-axis stroke	X high-speed, Y high-speed	X medium-speed, Y medium-speed
200mm	–	15kg
250mm	–	12.5kg
300mm	–	12.5kg
350mm	6.0kg	12kg
400mm	5.5kg	10.5kg

Note: For the X high-speed/Y high-speed type, the Y-axis stroke must be 350 mm or more.

Cable Length

Type	Cable code	Length
Standard type	**1L**	1m
	3L	3m
	5L	5m

* Axis 1 comes with a standard cable, while axis 2 comes with a robot cable.
** Cable length of second axis is defined by the length outside of cable track. If CT option is not choosed, longer cable is provided.
*** Refer to P. 89 for lengths other than those specified above.

Cable track

Wiring 1 (Next to X-axis)	X-axis stroke	50-300	350-600	650-800
Wiring 2 (Next to Y-axis)	Y-axis stroke	200	250-400	–

Options

Name	Option code	
Opposite-home specification	**NM**	
Slider roller specification	**SR**	Axis 1 (X-axis) Axis 2 (Y-axis)

Specifications

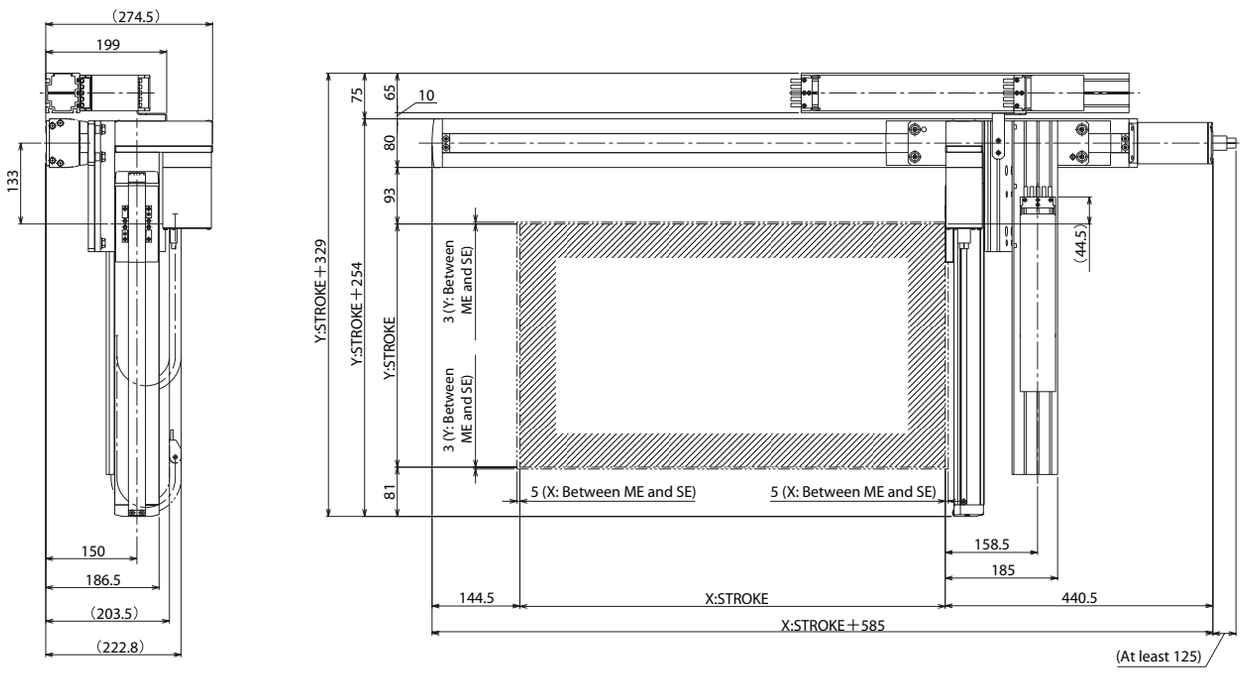
Item	X axis	Y axis
Axis model	RCP2-SS8C	RCP2-SA7R
Stroke (Can be set in 50-mm increments)	50-800mm	350-400mm
Axis 2	High-speed type: 250mm/s Medium-speed type: 125mm/s	High-speed type: 450mm/s Medium-speed type: 220mm/s
Motor size	56-square pulse motor	
Ball screw lead	High-speed type: 20mm Medium-speed type: 10mm	High-speed type: 16mm Medium-speed type: 8mm
Drive method	Ball screw, ø16mm, rolled, C10	Ball screw, ø12mm, rolled, C10
Positioning repeatability	±0.02mm	
Base material	Dedicated alloy steel	Aluminum
Surrounding air temperature/humidity	0 to 40°C, 85% RH or below (non-condensing)	

Dimensions

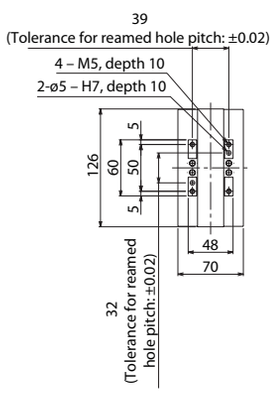
You can download CAD drawings from our website. www.robocylinder.de

2D CAD

Note 1. The connected position shown in the drawing defines the home.
Note 2. Both wiring 1 and wiring 2 assume use of a cable track.
Note 3. For details on the cable track, refer to P. 90.
Note 4. For details on the bracket on the moving end of the cable track, refer to P. 90.

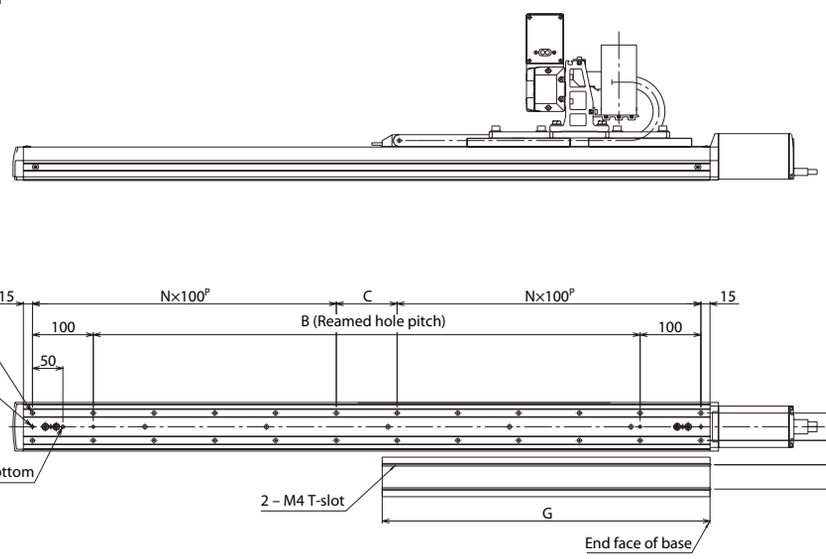


ME: Mechanical end
SE: Stroke end



Detail view of Y-axis slider

Detail view of slot in bottom face of X-axis base



Detail view of X-axis installation

■Dimensions by Stroke

X: Nominal stroke	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
X: Effective stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
B	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
C	50	100	150	0	50	100	150	0	50	100	150	0	50	100	150	0
D	12	12	12	14	16	16	16	18	20	20	20	22	24	24	24	26
N	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6
G	214.5	239.5	264.5	289.5	314.5	339.5	364.5	389.5	414.5	439.5	464.5	489.5	514.5	539.5	564.5	589.5

Controllers

Applicable controller

Refer to P. 90 for the controllers.

IK2-PXZB1□□S

RCP2 2-axis Combinations X axis: SS8R (Reversed, Single-slider)
Z axis: SA7R (Reversed)

Model Details

Series	Type	Encoder type	Axis 1 (X axis)	Axis 2 (Z axis)	Controllers	Cable			Shipping configuration
IK2	PXZB1□□S	□	□	□	P1	□	□	□	□

Type
- Combination directions: 1-4
- Differences between Single-slider and Double-slider Types: HH: X high-speed, Z high-speed; HM: X high-speed, Z medium-speed; HL: X high-speed, Z low-speed

Encoder type: I: Incremental

Axis 1 (X axis) / Axis 2 (Z axis)
- Stroke (mm): 5: 50mm ~ (Can be set in 50-mm increments)
- Options: B: Brake; NM: Opposite-home specification; SR: Slider roller specification

Cable
- Cable length: 1L: 1m; 3L: 3m; 5L: 5m; □L: □m
- Wiring 1: N: Cable only; CT: With cable track
- Wiring 2

Shipping configuration: K: Individual components (kit); A: Assembled

* Refer to P. 10 for details on the items comprising the model name.

Wiring 1 with cable track

Maximum Stroke

X axis 1000 mm　Z axis 250 mm

Axis 2 (High-speed type)

X axis 250 mm/s　Z axis 360 mm/s

Maximum Load Capacity

Z-axis stroke	Z high-speed, lead 16	Z medium-speed, lead 8	Z low-speed, lead 4
50mm	2.0kg	4.0kg	8.0kg
100mm	2.0kg	4.0kg	7.0kg
150mm	2.0kg	3.5kg	5.0kg
200mm	2.0kg	3.5kg	4.0kg
250mm	1.5kg	2.5kg	3.0kg

Cable Length

Type	Cable code	Length
Standard type	**1L**	1m
	3L	3m
	5L	5m

* Axis 1 comes with a standard cable, while axis 2 comes with a robot cable.
** Cable length of second axis is defined by the length outside of cable track. If CT option is not choosed, longer cable is provided.
*** Refer to P. 89 for lengths other than those specified above.

Cable track

Wiring 1 (Next to X-axis)	X-axis stroke	150-300	350-600	650-900	950-1000

Options

Name	Option code	
Opposite-home specification	**NM**	
Slider roller specification	**SR**	Axis 1 (X-axis) Axis 2 (Z-axis)

Specifications

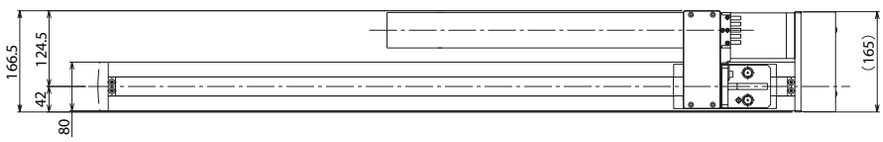
Item	X axis	Z axis
Axis model	RCP2-SS8R	RCP2-SA7R
Stroke (Can be set in 50-mm increments)	50-1000mm	50-250mm
Axis 2	High-speed type: 250mm/s	High-speed type: 360mm/s Medium-speed type: 180mm/s Low-speed type: 90mm/s
Motor size	56-square pulse motor	
Ball screw lead	High-speed type: 20mm	High-speed type: 16mm Medium-speed type: 8mm Low-speed type: 4mm
Drive method	Ball screw, ø16mm, rolled, C10	Ball screw, ø12mm, rolled, C10
Positioning repeatability	±0.02mm	
Base material	Dedicated alloy steel	Aluminum
Surrounding air temperature/humidity	0 to 40°C, 85% RH or below (non-condensing)	

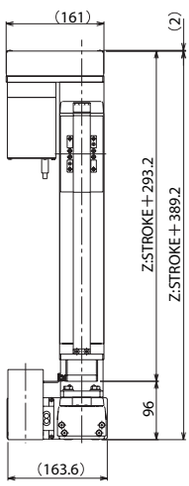
Dimensions

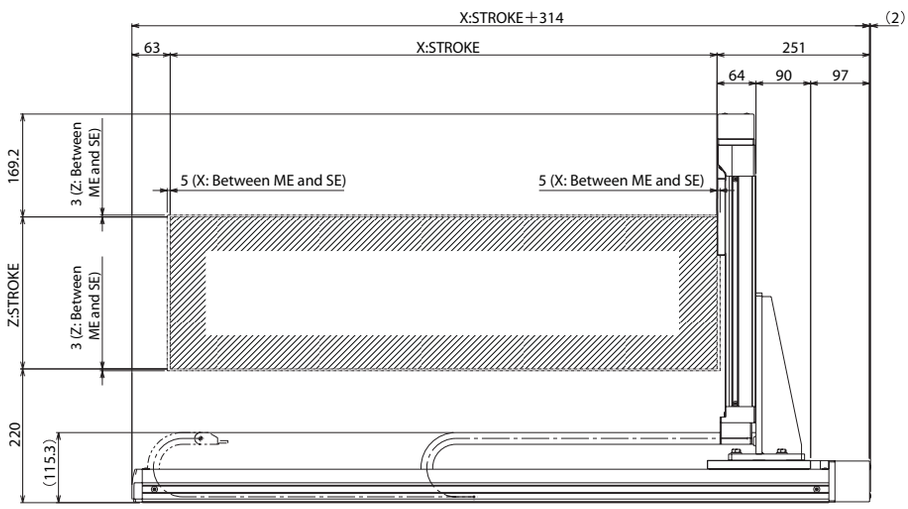
You can download CAD drawings from our website. www.robocylinder.de

2D CAD

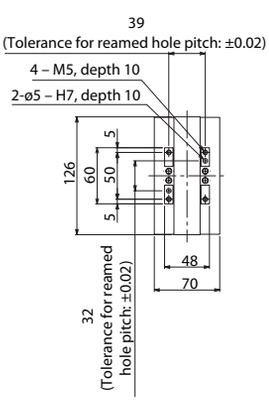
Note 1. The connected position shown in the drawing defines the home.
Note 2. Both wiring 1 and wiring 2 assume use of a cable track.
Note 3. For details on the cable track, refer to P. 90.
Note 4. For details on the bracket on the moving end of the cable track, refer to P. 90.



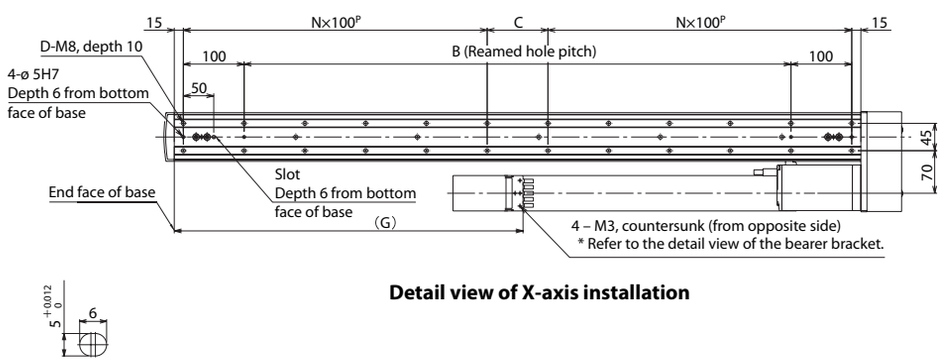




ME: Mechanical end
SE: Stroke end



Detail view of Z-axis slider



Detail view of X-axis installation

Detail view of slot in bottom face of X-axis base

■Dimensions by Stroke

X: Model	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
B	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
C	50	100	150	0	50	100	150	0	50	100	150	0	50	100	150	0	50	100	150	0
D	8	8	8	10	12	12	12	14	16	16	16	18	20	20	20	22	24	24	24	26
N	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6
G	–	–	199	224	249	274	299	324	349	374	399	424	449	474	499	524	549	574	599	624

* A bearer is not set when the X stroke is 50 or 100.

Controllers

Applicable controller

Refer to P. 90 for the controllers.

IK2-PXZB1□□D

RCP2 2-axis Combinations X axis: SS8R (Reversed, Double-slider)
Z axis: SA7R (Reversed)

Model Details

Series	Type	Encoder type	Axis 1 (X axis)		Axis 2 (Z axis)		Controllers	Cable			Shipping configuration
IK2	PXZB1□□D	□	□	□	□	□	P1	□	□	□	□

- **Combination directions** 1-4
- **Differences between Single-slider and Double-slider Types** HH: X high-speed, Z high-speed; HM: X high-speed, Z medium-speed; HL: X high-speed, Z low-speed
- **Encoder type** I: Incremental
- **Stroke (mm)** 5: 50mm ~ (Can be set in 50-mm increments)
- **Options** B: Brake; NM: Opposite-home specification; SR: Slider roller specification
- **Cable length** 1L: 1m; 3L: 3m; 5L: 5m; □L: □m
- **Wiring 1** N: Cable only; CT: With cable track
- **Wiring 2**
- **Shipping configuration** K: Individual components (kit); A: Assembled

* Refer to P. 10 for details on the items comprising the model name.

Wiring 1 with cable track

Maximum Stroke

X axis 800 mm　Z axis 300 mm

Axis 2 (High-speed type)

X axis 250 mm/s　Z axis 400 mm/s

Maximum Load Capacity

Z-axis stroke	Z high-speed, lead 16	Z medium-speed, lead 8	Z low-speed, lead 4
150mm	–	–	7.0kg
200mm	–	–	7.0kg
250mm	–	–	5.5kg
300mm	1.5kg	3.0kg	5.5kg

Note: For the Z high-speed type and Z medium-speed type, The Z-axis stroke is limited to 300 mm.

Cable Length

Type	Cable code	Length
Standard type	**1L**	1m
	3L	3m
	5L	5m

* Axis 1 comes with a standard cable, while axis 2 comes with a robot cable.
** Cable length of second axis is defined by the length outside of cable track. If CT option is not choosed, longer cable is provided.
*** Refer to P. 89 for lengths other than those specified above.

Cable track

Wiring 1 (Next to X-axis)	X-axis stroke	150-300	350-600	650-800

Options

Name	Option code	
Opposite-home specification	**NM**	
Slider roller specification	**SR**	Axis 1 (X-axis) Axis 2 (Z-axis)

Specifications

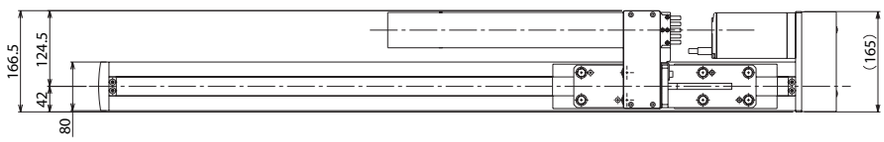
Item	X axis	Z axis
Axis model	RCP2-SS8R	RCP2-SA7R
Stroke (Can be set in 50-mm increments)	50-800mm	150-300mm
Axis 2	High-speed type: 250mm/s	High-speed type: 400mm/s Medium-speed type: 200mm/s Low-speed type: 100mm/s
Motor size	56-square pulse motor	
Ball screw lead	High-speed type: 20mm	High-speed type: 16mm Medium-speed type: 8mm Low-speed type: 4mm
Drive method	Ball screw, ø16mm, rolled, C10	Ball screw, ø12mm, rolled, C10
Positioning repeatability	±0.02mm	
Base material	Dedicated alloy steel	Aluminum
Surrounding air temperature/humidity	0 to 40°C, 85% RH or below (non-condensing)	

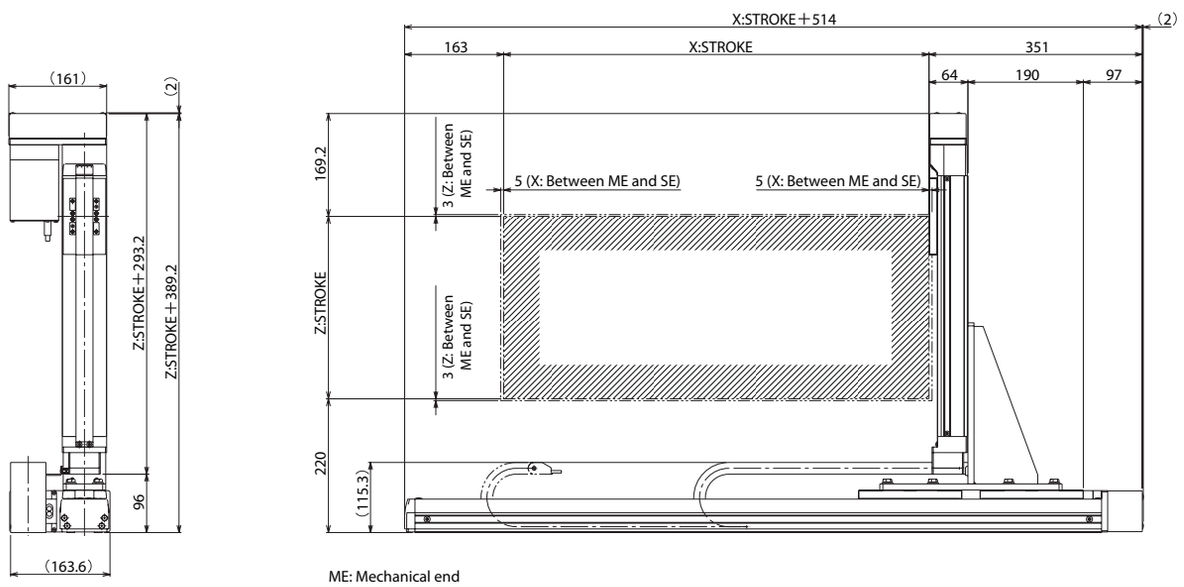
Dimensions

You can download CAD drawings from our website. www.robocylinder.de

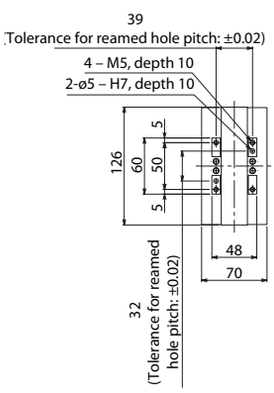
2D CAD

Note 1. The connected position shown in the drawing defines the home.
Note 2. Both wiring 1 and wiring 2 assume use of a cable track.
Note 3. For details on the cable track, refer to P. 90.
Note 4. For details on the bracket on the moving end of the cable track, refer to P. 90.

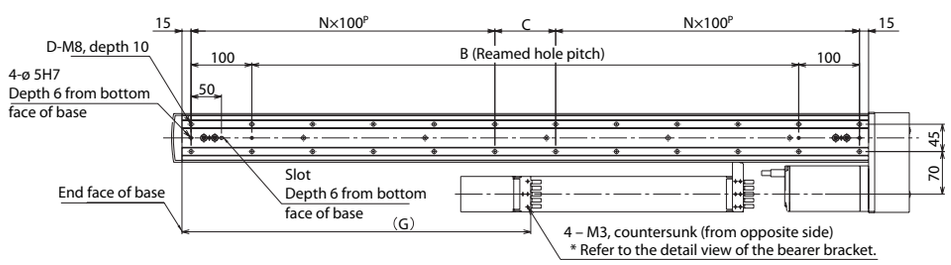




ME: Mechanical end
SE: Stroke end



Detail view of Z-axis slider



Detail view of X-axis installation

Detail view of slot in bottom face of X-axis base

■Dimensions by Stroke

X: Nominal stroke	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
X: Effective stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
B	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
C	50	100	150	0	50	100	150	0	50	100	150	0	50	100	150	0
D	12	12	12	14	16	16	16	18	20	20	20	22	24	24	24	26
N	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6
G	–	–	299	324	349	374	399	424	449	474	499	524	549	574	599	624

* A bearer is not set when the X stroke is 50 or 100.

Controllers

Applicable controller

Refer to P. 90 for the controllers.

IK2-PYBB1□□S

RCP2 2-axis Combinations Y axis: SS8R (Reversed, Double-slider)
Z axis: SA7R (Reversed)

Model Details

Series — Type — Encoder type — Axis 1 (Y axis) — Axis 2 (Z axis) — Controllers — Cable — Shipping configuration

IK2 – **PYBB1□□S** – □ – □ □ – □ □ – **P1** – □ – □ – □ – □

Combination directions
1-2

Differences between Single-slider and Double-slider Types
HH: Y high-speed, Z high-speed
HM: Y high-speed, Z medium-speed
HL: Y high-speed, Z low-speed

Encoder type
I: Incremental

Stroke (mm)
5: 50mm
≀
(Can be set in 50-mm increments)

Options
B: Brake
NM: Opposite-home specification
SR: Slider roller specification

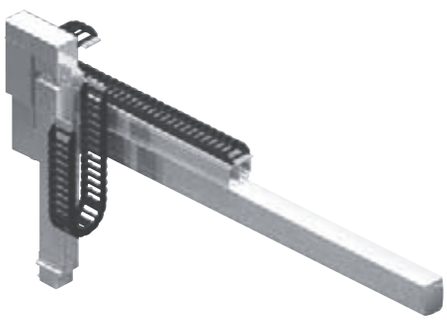
Cable length
1L: 1m
3L: 3m
5L: 5m
□L: □m

Wiring 1
N: Cable only
CT: With cable track

Wiring 2

Shipping configuration
K: Individual components (kit)
A: Assembled

* Refer to P. 10 for details on the items comprising the model name.



Both wiring 1 and wiring 2 assume use of a cable track.

Maximum Stroke

Y axis 1000 mm Z axis 300 mm

Axis 2 (High-speed type)

Y axis 250 mm/s Z axis 360 mm/s

Maximum Load Capacity

Z-axis stroke	Z high-speed, lead 16	Z medium-speed, lead 8	Z low-speed, lead 4
50mm	2.0kg	4.0kg	8.0kg
100mm	2.0kg	4.0kg	8.0kg
150mm	2.0kg	3.5kg	7.0kg
200mm	2.0kg	3.5kg	7.0kg
250mm	1.5kg	3.0kg	6.0kg
300mm	1.5kg	3.0kg	5.5kg

Cable Length

Type	Cable code	Length
Standard type	**1L**	1m
	3L	3m
	5L	5m

* Axis 1 comes with a standard cable, while axis 2 comes with a robot cable.
** Cable length of second axis is defined by the length outside of cable track. If CT option is not choosed, longer cable is provided.
*** Refer to P. 89 for lengths other than those specified above.

Cable track

Wiring 1 (Next to Y-axis)	Y-axis stroke	50-300	350-600	650-900	950-1000
Wiring 2 (Next to Z-axis)	Z-axis stroke	50-200	250-300	–	–
				–	–

Options

Name	Option code	
Opposite-home specification	**NM**	
Slider roller specification	**SR**	Axis 1 (Y-axis) Axis 2 (Z-axis)

Specifications

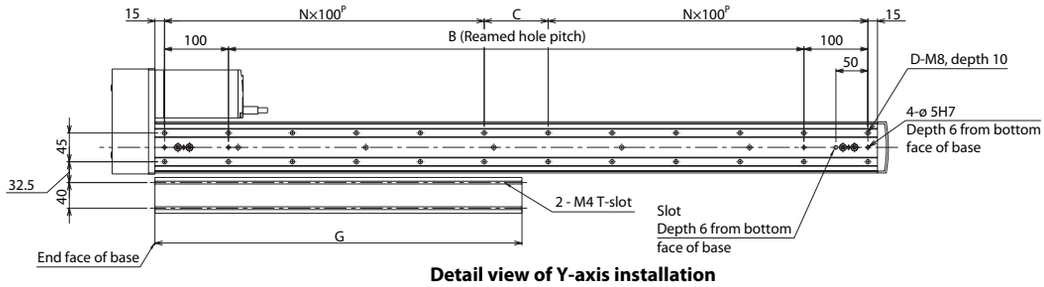
Item	Y axis	Z axis
Axis model	RCP2-SS8R	RCP2-SA7R
Stroke (Can be set in 50-mm increments)	50-1000mm	50-300mm
Axis 2	High-speed type: 250mm/s	High-speed type: 360mm/s Medium-speed type: 180mm/s Low-speed type: 90mm/s
Motor size	56-square pulse motor	
Ball screw lead	High-speed type: 20mm	High-speed type: 16mm Medium-speed type: 8mm Low-speed type: 4mm
Drive method	Ball screw, ø16mm, rolled, C10	Ball screw, ø12mm, rolled, C10
Positioning repeatability	±0.02mm	
Base material	Dedicated alloy steel	Aluminum
Surrounding air temperature/humidity	0 to 40°C, 85% RH or below (non-condensing)	

Dimensions

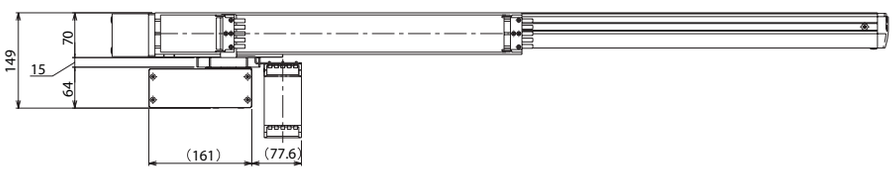
You can download CAD drawings from our website. www.robocylinder.de

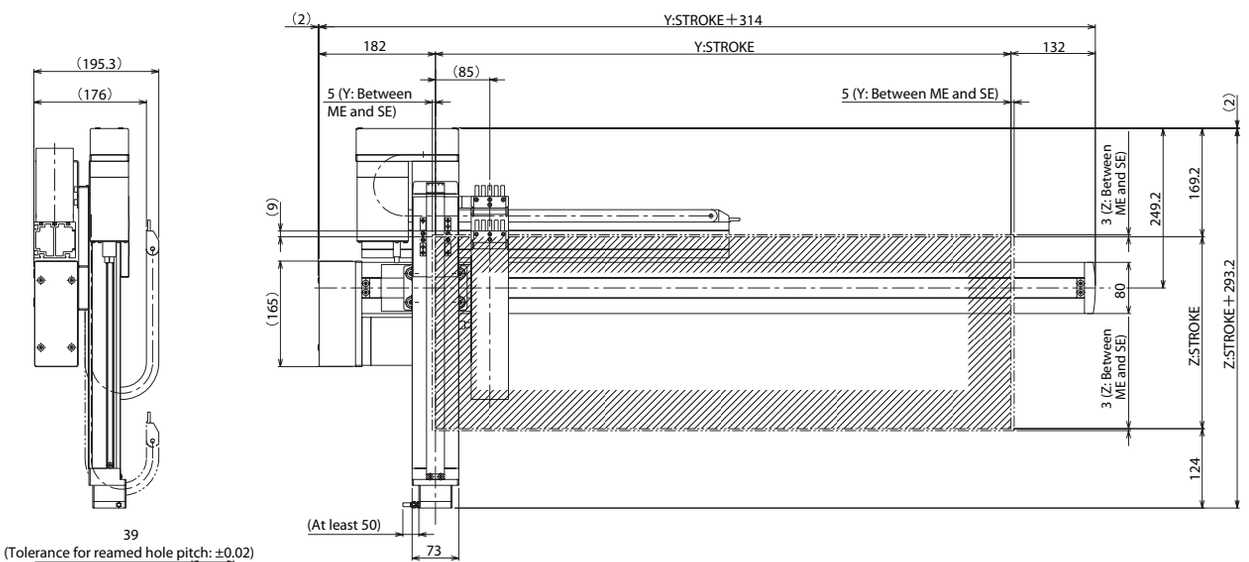
2D CAD

Note 1. The connected position shown in the drawing defines the home.
Note 2. Both wiring 1 and wiring 2 assume use of a cable track.
Note 3. For details on the cable track, refer to P. 90.
Note 4. For details on the bracket on the moving end of the cable track, refer to P. 90.

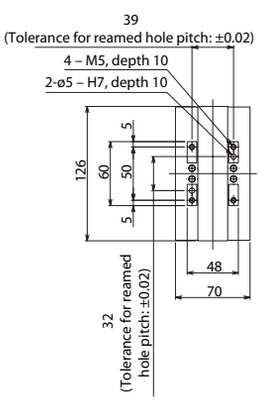


Detail view of Y-axis installation





ME: Mechanical end
SE: Stroke end



Detail view of Z-axis slider

Detail view of slot in bottom face of Y-axis base

Dimensions by Stroke

Y: Model	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
B	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
C	50	100	150	0	50	100	150	0	50	100	150	0	50	100	150	0	50	100	150	0
D	8	8	8	10	12	12	12	14	16	16	16	18	20	20	20	22	24	24	24	26
N	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6
G	149	174	199	224	249	274	299	324	349	374	399	424	449	474	499	524	549	574	599	624

Controllers

Applicable controller

Refer to P. 90 for the controllers.

IK3-PBBG1□□S

RCP2 3-axis combination (XYB+Z-axes, base mount)
X axis: SS8R (Reversed, Single-slider)
Y axis: SA7R (Reversed) Z axis: SA6R (Reversed)

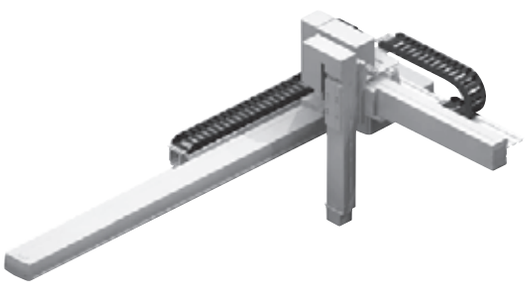
Model Details

Series — Type — Encoder type — Axis 1 (X axis) — Axis 2 (Y axis) — Axis 3 (Z axis) — Controllers — Cable — Shipping configuration

IK3 — PBBG1□□S — □ — □ □ — □ □ — □ □ — □ B□ — P1 — □ — □ — □ — □

- Combination directions: 1-2
- Differences between Single-slider and Double-slider Types: HHH: X high-speed, Y high-speed, Z high-speed; HHM: X high-speed, Y high-speed, Z medium-speed; HHL: X high-speed, Y high-speed, Z low-speed
- Encoder type: I: Incremental
- Stroke (mm): 5: 50mm ~ (Can be set in 50-mm increments)
- Options: B: Brake; NM: Opposite-home specification; SR: Slider roller specification
- Cable length: 1L: 1m; 3L: 3m; 5L: 5m; □L: □m
- Wiring 1: N: Cable only; CT: With cable track
- Wiring 2
- Shipping configuration: K: Individual components (kit); A: Assembled

* Refer to P. 10 for details on the items comprising the model name.



With cable tracks (Wiring 3 does not come with a cable track.)

Maximum Stroke

X axis 1000 mm | Y axis 300 mm | Z axis 200 mm

Axis 2

	X high-speed, Y high-speed, Z high-speed	X high-speed, Y high-speed, Z medium-speed	X high-speed, Y high-speed, Z low-speed
X axis	220mm/s		
Y axis	420mm/s		
Z axis	500mms	250mm/s	125mm/s

Maximum Load Capacity

Y-axis stroke	X high-speed, Y high-speed, Z high-speed	X high-speed, Y high-speed, Z medium-speed	X high-speed, Y high-speed, Z low-speed
50mm	1.0kg	2.0kg	4.0kg
100mm			
150mm			
200mm			
250mm			
300mm			

Cable Length

Type	Cable code	Length
Standard type	**1L**	1m
	3L	3m
	5L	5m

* Axis 1 comes with a standard cable, while axis 2 comes with a robot cable.
** Cable length of second axis is defined by the length outside of cable track. If CT option is not choosed, longer cable is provided.
*** Refer to P. 89 for lengths other than those specified above.

Cable track

		Y-axis stroke	
		50-200	250-300
X-axis stroke	50-400	–	–
	450-600	–	–
	650-800	–	–
	850-1000	–	–

Note) Both wiring 1 and wiring 2 should have a cable bear, or neither of the two should have a cable track. A cable track cannot be specified for one of the wirings.

Cable Length

Name	Option code
Opposite-home specification	**NM**
Slider roller specification	**SR**

Specifications

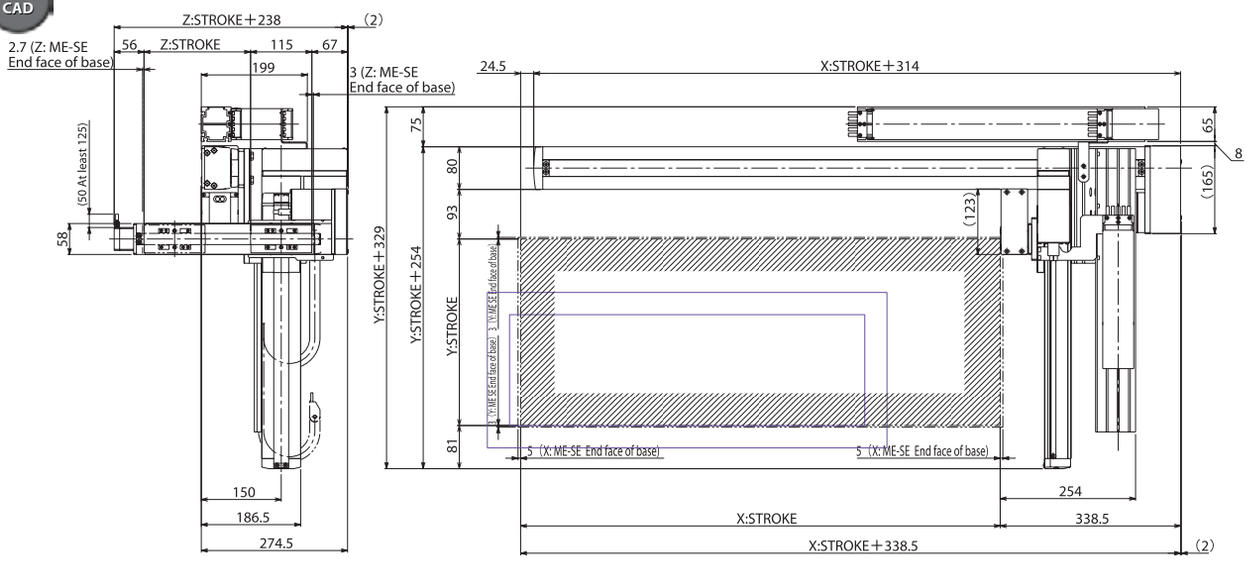
Item	X axis	Y axis	Z axis
Axis model	RCP2-SS8R	RCP2-SA7R	RCP2-SA6R
Stroke (Can be set in 50-mm increments)	50-1000mm	50-300mm	50-200mm
Axis 2	High-speed type: 220mm/s	High-speed type: 420mm/s	High-speed type: 500mm/s Medium-speed type: 250mm/s Low-speed type: 125mm/s
Motor size	56-square pulse motor	56-square pulse motor	42-square pulse motor
Ball screw lead	High-speed type: 20mm	High-speed type: 16mm	High-speed type: 12mm Medium-speed type: 6mm Low-speed type: 3mm
Drive method	Ball screw, ø16mm, rolled, C10	Ball screw, ø12mm, rolled, C10	Ball screw, ø10mm, rolled, C10
Positioning repeatability	±0.02mm		
Base material	Dedicated alloy steel	Aluminum	
Surrounding air temperature/humidity	0 to 40°C, 85% RH or below (non-condensing)		

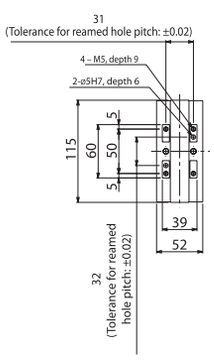
Dimensions

You can download CAD drawings from our website. www.robocylinder.de

Note 1. The connected position shown in the drawing defines the home.
Note 2.The drawing below assumes that both wiring 1 and wiring 2 have a cable track.
Note 3. For details on the cable track, refer to P. 90.

2D CAD

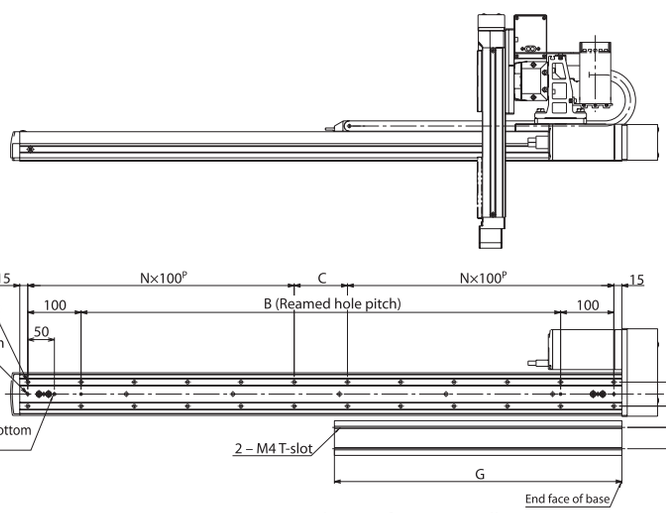




Detail view of Z-axis slider

Detail view of slot in bottom face of X-axis base

ME: Mechanical end
SE: Stroke end



Detail view of X-axis installation

Dimensions by Stroke

X: Model	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
B	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
C	50	100	150	0	50	100	150	0	50	100	150	0	50	100	150	0	50	100	150	0
D	8	8	8	10	12	12	12	14	16	16	16	18	20	20	20	22	24	24	24	26
N	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6
G	114.5	139.5	164.5	189.5	214.5	239.5	264.5	289.5	314.5	339.5	364.5	389.5	414.5	439.5	464.5	489.5	514.5	539.5	564.5	589.5

Controllers

Applicable controller

Refer to P. 90 for the controllers.

IK3-PBBG1□□D

RCP2 3-axis combination (XYB+Z-axes, base mount)
X axis: SS8R (Reversed, Double-slider)
Y axis: SA7R (Reversed) Z axis: SA6R (Reversed)

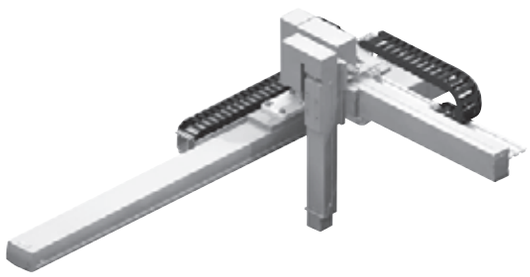
Model Details

Series — Type — Encoder type — Axis 1 (X axis) — Axis 2 (Y axis) — Axis 3 (Z axis) — Controllers — Cable — Shipping configuration

IK3 – PBBG1□□D – □ – □ □ – □ □ – □ B□ – **P1** – □ – □ – □ – □

- Combination directions: 1-2
- Differences between Single-slider and Double-slider Types: HHH: X high-speed, Y high-speed, Z high-speed; HHM: X high-speed, Y high-speed, Z medium-speed; HHL: X high-speed, Y high-speed, Z low-speed
- Encoder type: I: Incremental
- Stroke (mm): 5: 50mm ~ (Can be set in 50-mm increments)
- Options: B: Brake; NM: Opposite-home specification; SR: Slider roller specification
- Cable length: 1L: 1m; 3L: 3m; 5L: 5m; □L: □m
- Wiring 1: N: Cable only; CT: With cable track
- Wiring 2
- Shipping configuration: K: Individual components (kit); A: Assembled

* Refer to P. 10 for details on the items comprising the model name.



With cable tracks (Wiring 3 does not come with a cable track.)

Maximum Stroke

X axis 800 mm | Y axis 400 mm | Z axis 200 mm

Axis 2

	X high-speed, Y high-speed, Z high-speed	X high-speed, Y high-speed, Z medium-speed	X high-speed, Y high-speed, Z low-speed
X axis	220mm/s		
Y axis	420mm/s		
Z axis	500mms	250mm/s	125mm/s

Maximum Load Capacity

Y-axis stroke	X high-speed, Y high-speed, Z high-speed	X high-speed, Y high-speed, Z medium-speed	X high-speed, Y high-speed, Z low-speed
350mm	1.0kg	2.0kg	4.0kg
400mm			

Cable Length

Type	Cable code	Length
Standard type	1L	1m
	3L	3m
	5L	5m

* Axis 1 comes with a standard cable, while axis 2 comes with a robot cable.
** Cable length of second axis is defined by the length outside of cable track. If CT option is not choosed, longer cable is provided.
*** Refer to P. 89 for lengths other than those specified above.

Cable track

		Y-axis stroke
		350-400
X-axis stroke	50-400	–
	450-600	–
	650-800	–

Note) Both wiring 1 and wiring 2 should have a cable bear, or neither of the two should have a cable track. A cable track cannot be specified for one of the wirings.

Cable Length

Name	Option code
Opposite-home specification	NM
Slider roller specification	SR

Specifications

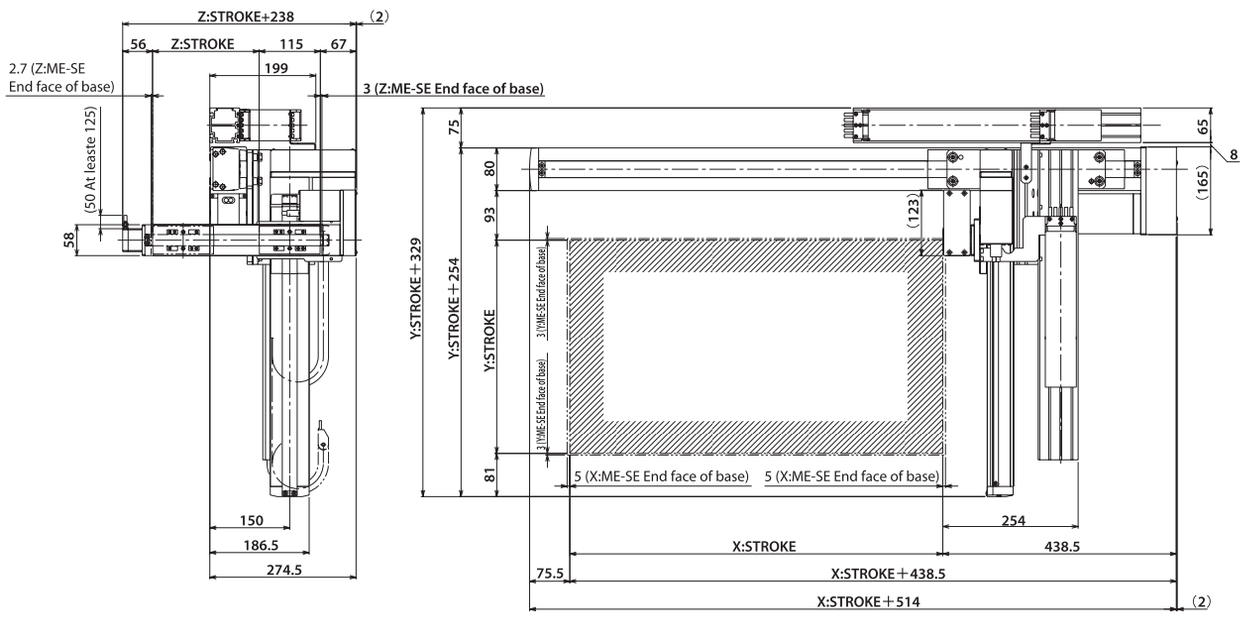
Item	X axis	Y axis	Z axis
Axis model	RCP2-SS8R	RCP2-SA7R	RCP2-SA6R
Stroke (Can be set in 50-mm increments)	50-800mm	350-400mm	50-200mm
Axis 2	High-speed type: 220mm/s	High-speed type: 420mm/s	High-speed type: 500mm/s Medium-speed type: 250mm/s Low-speed type: 125mm/s
Motor size	56-square pulse motor	56-square pulse motor	42-square pulse motor
Ball screw lead	High-speed type: 20mm	High-speed type: 16mm	High-speed type: 12mm Medium-speed type: 6mm Low-speed type: 3mm
Drive method	Ball screw, ø16mm, rolled, C10	Ball screw, ø12mm, rolled, C10	Ball screw, ø10mm, rolled, C10
Positioning repeatability	±0.02mm		
Base material	Dedicated alloy steel	Aluminum	
Surrounding air temperature/humidity	0 to 40°C, 85% RH or below (non-condensing)		

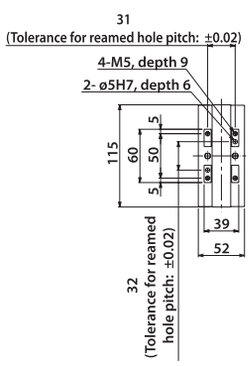
Dimensions

You can download CAD drawings from our website. www.robocylinder.de

2D CAD

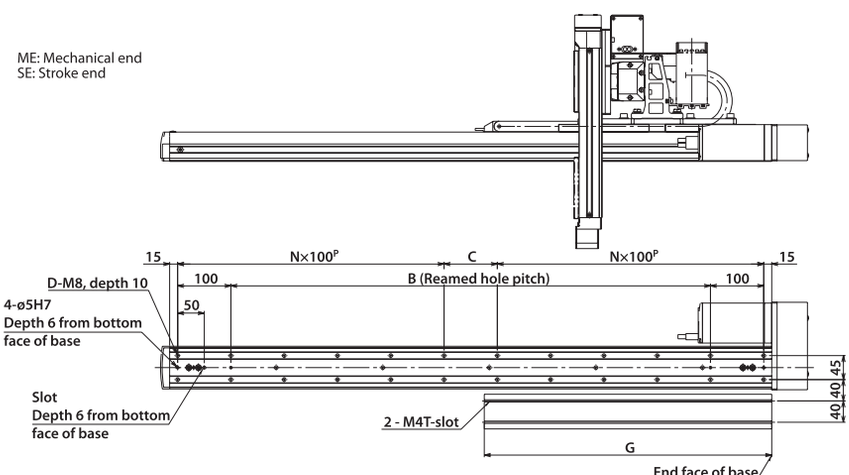
Note 1. The connected position shown in the drawing defines the home.
Note 2.The drawing below assumes that both wiring 1 and wiring 2 have a cable track.
Note 3. For details on the cable track, refer to P. 90.





Detail view of Z-axis slider

Detail view of slot in bottom



Detail view of X-axis installation

Dimensions by Stroke

X: Nominal stroke	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
X: Effective stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
B	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
C	50	100	150	0	50	100	150	0	50	100	150	0	50	100	150	0
D	12	12	12	14	16	16	16	18	20	20	20	22	24	24	24	26
N	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6
G	214.5	239.5	264.5	289.5	314.5	339.5	364.5	389.5	414.5	439.5	464.5	489.5	514.5	539.5	564.5	589.5

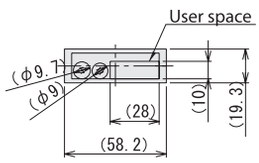
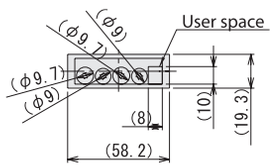
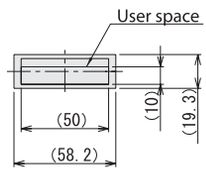
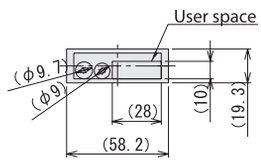
Controllers

Applicable controller

Refer to P. 90 for the controllers.

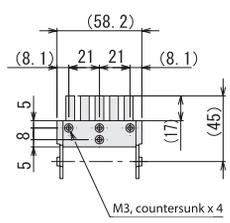
Reference

Cable Track

Section view of axis 1 cable storage		Detail view of axis 2 cable storage	
			
2-axis combination	3-axis combination	2-axis combination	3-axis combination

Detail View of Bracket on Moving End of Cable Track

Moving end of cable track for wiring 2 in XYB or YZ combination
Moving end of cable track for wiring 1 in XZ combination



Cable Length

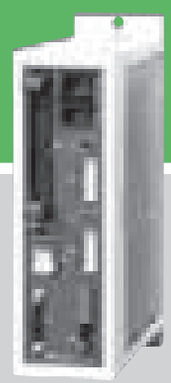
Cable code	Length
1L	1m
2L	2m
3L	3m
4L	4m
5L	5m
6L	6m
7L	7m
8L	8m
9L	9m
10L	10m
11L	11m
12L	12m
13L	13m
14L	14m
15L	15m
16L	16m
17L	17m
18L	18m
19L	19m
20L	20m

* Axis 1 comes with a standard cable, while axes 2 and 3 come with a robot cable.

Controllers

PSEL

RCP2-series
program controller



Model List

A program controller capable of operating RCP2-series actuators. Various controls can be performed with a single unit.

Type	C	
Name	Program mode	Positioner mode
Exterior view		
Description	This controller can operate actuators and communicate with external devices without requiring any additional device. If two axes are operated, arc interpolation and path operation can be performed.	Up to 1500 positioning points are supported. Push-motion operation and teaching operation are also possible.
Number of positions	1500	

Model

* Details of axis 2 are not required if the controller is of 1-axis specification.

PSEL — C — [Number of connected axes] — [(Details of axis 1) Motor type] I [Encoder type] [Options] — ([(Details of axis 2) Motor type] I [Encoder type] [Options]) — [I/O type] — [I/O cable length] — [Power-supply voltage] — 0

Series: PSEL

Type

C	Standard type

Number of connected axes

1	1-Axis specification
2	2-Axes specification

(Details of axis 1) Motor type

20P	20-square pulse motor
28P	28-square pulse motor
28SP	28-square pulse motor (for RCP2-RA3C only)
35P	35-square pulse motor
42P	42-square pulse motor
56P	56-square pulse motor

* If the RCP2-RA3C or RGD3C is to be connected, the motor type must be 28SP.

(Details of axis 1) Encoder type

I	Incremental

(Details of axis 1) Options

B	Brake

(Details of axis 2) Motor type

20P	20-square pulse motor
28P	28-square pulse motor
28SP	28-square pulse motor (for RCP2-RA3C only)
35P	35-square pulse motor
42P	42-square pulse motor
56P	56-square pulse motor

* If the RCP2-RA3C or RGD3C is to be connected, the motor type must be 28SP.

(Details of axis 2) Encoder type

I	Incremental

(Details of axis 2) Options

B	Brake

I/O type

NP	PIO NPN specification (standard)
PN	PIO PNP specification
DV	DeviceNet Connection specification
CC	CC-Link Connection specification
PR	ProfiBus Connection specification

I/O cable length

0	No cable
2	2m
3	3m
5	5m

Power-supply voltage

0	DC24V

I/O Specifications

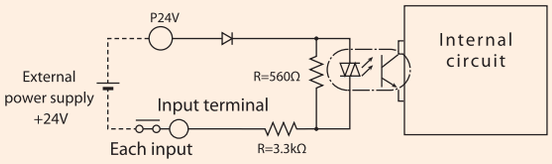
■Input External input specifications

Item	Specification
Input voltage	DC24V ±10%
Input current	7 mA per circuit
ON/OFF voltages	ON voltage (min.) NPN: DC16V/PNP: DC8V OFF voltage (max.) NPN: DC5V/PNP: DC19V
Insulation method	Photo-coupler

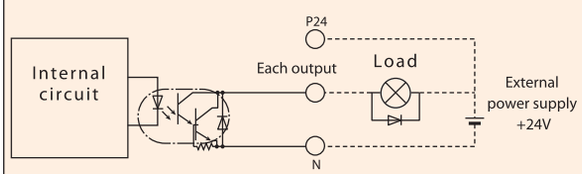
■Output External output specifications

Item	Specification
Load voltage	DC24V
Maximum load current	100 mA per point, total 400 mA for 8 points
Leak current (max.)	Max. 0.1 mA per point
Insulation method	Photo-coupler

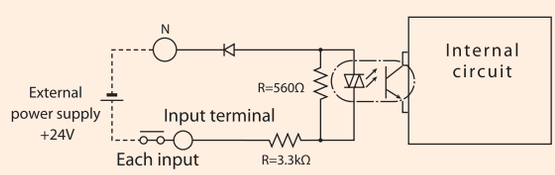
NPN specification



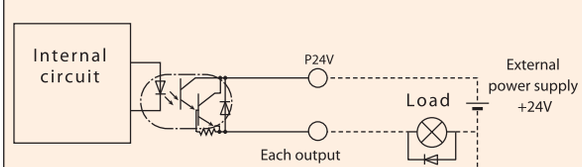
NPN specification



PNP specification



PNP specification



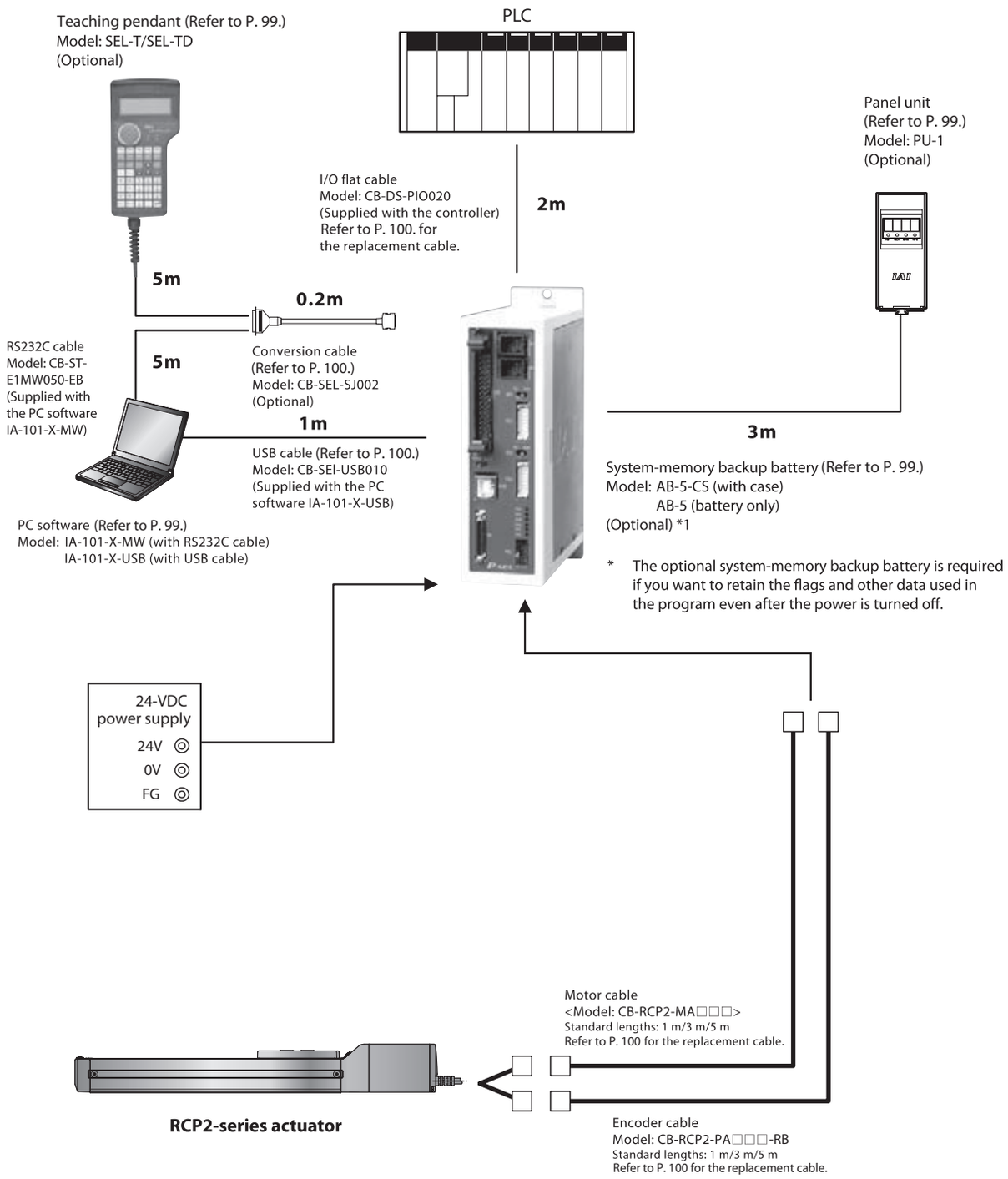
Explanation of I/O Functions

The PSEL controller can be operated in the "Program Mode" where a program is entered to operate the actuator or "Positioner Mode" where the actuator is moved to positions specified by signals received from a host PLC.
The positioner mode includes the following five input patterns to support various applications.

■Functions by Controller Type

Operation mode		Features
Program mode		You can use Super SEL, a language that allows for complex controls using simple commands, to perform linear and smooth interpolation operations, path operation ideal for coating and other applications, arch motion and palletizing operations, and more.
Product-type Switchover Mode	Standard mode	The basic operation mode where all you need is to specify a position number and enter a start signal. Push-motion operation, and linear interpolation operation of two axes, is also supported.
	Type switching mode	When the system handles multiple loads of the same shape but slightly different hole positions, you can issue movement commands to the same position number by changing the type number.
	2-axis independent mode	When a 2-axis controller is used, the two axes can be operated independently using separate commands.
	Teaching mode	The slider (rod) can be moved using an external signal to register the stopped position as position data.
	DS-S-C1 compatible mode	If you have been using a DS-S-C1 controller, you can swap it with a PSEL controller without having to change the host programs. * Compatibility with actuators is not assured.

System Configuration



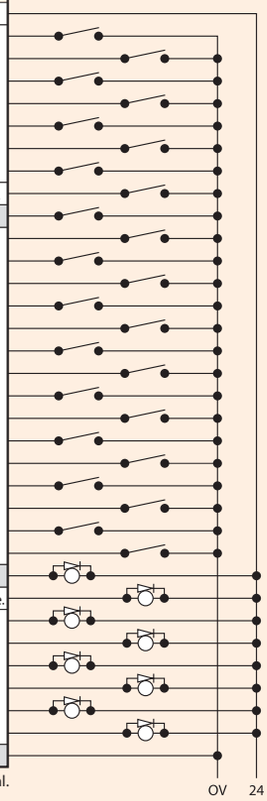
Explanation of I/O Functions

Program Mode

Pin No.	Category	Port No.	Program Mode	Function
1A	P24		24-V input	Connect 24 V.
1B	Input	016	Program No. 1 selection	Select the program number of the program you want to start. (Enter one of ports 016 to 022 by a BCD code.)
2A		017	Program No. 2 selection	
2B		018	Program No. 4 selection	
3A		019	Program No. 8 selection	
3B		020	Program No. 10 selection	
4A		021	Program No. 20 selection	
4B		022	Program No. 40 selection	
5A		023	CPU reset	The system is reset and enters the same state achieved after the power has been reconnected.
5B		000	Start	The program selected by one of port Nos. 016 to 022 is started.
6A		001	General-purpose input	The system waits for an external input in response to a program command.
6B		002	General-purpose input	
7A		003	General-purpose input	
7B		004	General-purpose input	
8A		005	General-purpose input	
8B		006	General-purpose input	
9A		007	General-purpose input	
9B		008	General-purpose input	
10A		009	General-purpose input	
10B		010	General-purpose input	
11A		011	General-purpose input	
11B		012	General-purpose input	
12A		013	General-purpose input	
12B		014	General-purpose input	
13A		015	General-purpose input	
13B	Output	300	Alarm	This signal is output when an alarm has occurred. (Contact B)
14A		301	Ready	This signal is output when the controller has started properly and become ready to operate.
14B		302	General-purpose output	These signals can be turned ON/OFF freely using program commands.
15A		303	General-purpose output	
15B		304	General-purpose output	
16A		305	General-purpose output	
16B		306	General-purpose output	
17A		307	General-purpose output	
17B	N		OV input	Connect OV.

* With regard to PNP wiring diagram, please refer to PSEL manual.

Wiring diagram (NPN)*

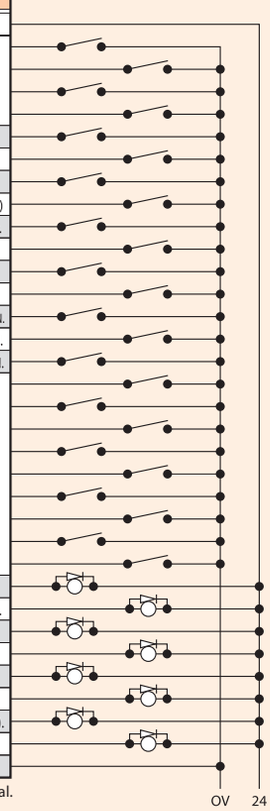


Positioner, Standard Mode

Pin No.	Category	Port No.	Standard Positioner Mode	Function
1A	P24		24-V input	Connect 24 V.
1B	Input	016	Position input 10	Use one of port Nos. 007 to 019 to specify the position number corresponding to the position to move the actuator to. The value can be specified by either a BCD or binary code.
2A		017	Position input 11	
2B		018	Position input 12	
3A		019	Position input 13	
3B		020	–	–
4A		021	–	–
4B		022	–	–
5A		023	Error reset	This signal resets minor errors. (The power must be reconnected to reset major errors.)
5B		000	Start	The actuator starts moving to the position corresponding to the selected position number.
6A		001	Home return	The actuator returns home.
6B		002	Servo ON	The servo is turned ON/OFF.
7A		003	Push motion	The actuator performs push-motion operation.
7B		004	Pause	The actuator pauses when this signal turns OFF, and resumes the remaining operation when the signal turns ON.
8A		005	Cancel	The actuator stops when this signal turns OFF, and the remaining operation is cancelled.
8B		006	Interpolation setting	In the case of a 2-axis specification, the actuators move via linear interpolation while this signal is ON.
9A		007	Position input 1	Use one of port Nos. 007 to 019 to specify the position number corresponding to the position to move the actuator to. The value can be specified by either a BCD or binary code.
9B		008	Position input 2	
10A		009	Position input 3	
10B		010	Position input 4	
11A		011	Position input 5	
11B		012	Position input 6	
12A		013	Position input 7	
12B		014	Position input 8	
13A		015	Position input 9	
13B	Output	300	Alarm	This signal is output when an alarm has occurred. (Contact B)
14A		301	Ready	This signal is output when the controller has started properly and become ready to operate.
14B		302	Positioning complete	This signal is output when movement to the specified position has completed.
15A		303	Home return complete	This signal is output when home return has completed.
15B		304	Servo ON output	This signal is output while the servo is ON.
16A		305	Push-motion complete	This signal is output when push-motion operation has completed.
16B		306	System battery error	This signal is output when the system battery voltage has dropped (to the warning level).
17A		307	–	–
17B	N		OV input	Connect OV.

* With regard to PNP wiring diagram, please refer to PSEL manual.

Wiring diagram (NPN)*



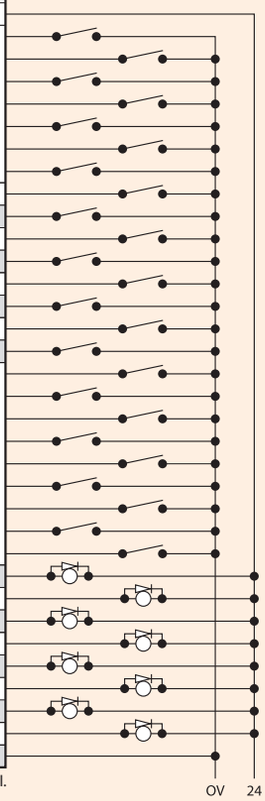
Explanation of I/O Functions

Positioner, Product-Type Switchover Mode

Pin No.	Category	Port No.	Type-switching Positioner Mode	Function
1A	P24		24-V input	Connect 24 V.
1B	Input	016	Position/type input 10	Use one of port Nos. 007 to 022 to specify the position number corresponding to the position to move the actuator to, and another to specify the type number. Assignment of position numbers and type numbers are set using parameters. The value can be specified by either a BCD or binary code.
2A		017	Position/type input 11	
2B		018	Position/type input 12	
3A		019	Position/type input 13	
3B		020	Position/type input 14	
4A		021	Position/type input 15	
4B		022	Position/type input 16	
5A		023	Error reset	This signal resets minor errors. (The power must be reconnected to reset major errors.)
5B		000	Start	The actuator starts moving to the position corresponding to the selected position number.
6A		001	Home return	The actuator returns home.
6B		002	Servo ON	The servo is turned ON/OFF.
7A		003	Push motion	The actuator performs push-motion operation.
7B		004	Pause	The actuator pauses when this signal turns OFF, and resumes the remaining operation when the signal turns ON.
8A		005	Cancel	The actuator stops when this signal turns OFF, and the remaining operation is cancelled.
8B		006	Interpolation setting	In the case of a 2-axis specification, the actuators move via linear interpolation while this signal is ON.
9A		007	Position/type input 1	Use one of port Nos. 007 to 022 to specify the position number corresponding to the position to move the actuator to, and another to specify the type number. Assignment of position numbers and type numbers are set using parameters. The value can be specified by either a BCD or binary code.
9B		008	Position/type input 2	
10A		009	Position/type input 3	
10B		010	Position/type input 4	
11A		011	Position/type input 5	
11B		012	Position/type input 6	
12A		013	Position/type input 7	
12B		014	Position/type input 8	
13A		015	Position/type input 9	
13B	Output	300	Alarm	This signal is output when an alarm has occurred. (Contact B)
14A		301	Ready	This signal is output when the controller has started properly and become ready to operate.
14B		302	Positioning complete	This signal is output when movement to the specified position has completed.
15A		303	Home return complete	This signal is output when home return has completed.
15B		304	Servo ON output	This signal is output while the servo is ON.
16A		305	Push-motion complete	This signal is output when push-motion operation has completed.
16B		306	System battery error	This signal is output when the system battery voltage has dropped (to the warning level).
17A		307	–	–
17B	N		OV input	Connect OV.

* With regard to PNP wiring diagram, please refer to PSEL manual.

Wiring diagram (NPN)*

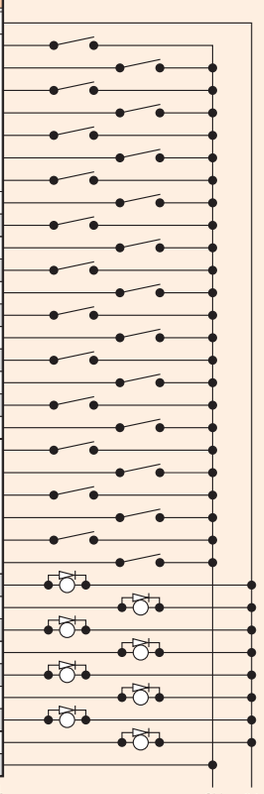


Positioner, 2-axes Independent Mode

Pin No.	Category	Port No.	Type-switching Positioner Mode	Function
1A	P24		24-V input	Connect 24 V.
1B	Input	016	Position input 7	Use any of port Nos. 010 to 022 to specify the position number corresponding to the position to move the actuator to. Assignment of position numbers for axes 1 and 2 are set using parameters. The value can be specified by either a BCD or binary code.
2A		017	Position input 8	
2B		018	Position input 9	
3A		019	Position input 10	
3B		020	Position input 11	
4A		021	Position input 12	
4B		022	Position input 13	
5A		023	Error reset	This signal resets minor errors. (The power must be reconnected to reset major errors.)
5B		000	Start 1	Axis 1 starts moving to the selected position number.
6A		001	Home return 1	Axis 1 returns home.
6B		002	Servo ON 1	The servo of axis 1 is turned ON/OFF.
7A		003	Pause 1	Axis 1 pauses when this signal turns OFF, and resumes the remaining operation when the signal turns ON.
7B		004	Cancel 1	Movement of axis 1 is cancelled.
8A		005	Start 2	Axis 2 starts moving to the selected position number.
8B		006	Home return 2	Axis 2 returns home.
9A		007	Servo ON 2	The servo of axis 2 is turned ON/OFF.
9B		008	Pause 2	Axis 2 pauses when this signal turns OFF, and resumes the remaining operation when the signal turns ON.
10A		009	Cancel 2	Movement of axis 2 is cancelled.
10B		010	Position input 1	Use any of port Nos. 010 to 022 to specify the position number corresponding to the position to move the actuator to. Assignment of position numbers for axes 1 and 2 are set using parameters. The value can be specified by either a BCD or binary code.
11A		011	Position input 2	
11B		012	Position input 3	
12A		013	Position input 4	
12B		014	Position input 5	
13A		015	Position input 6	
13B	Output	300	Alarm	This signal is output when an alarm has occurred. (Contact B)
14A		301	Ready	This signal is output when the controller has started properly and become ready to operate.
14B		302	Positioning complete 1	This signal is output when movement of axis 1 to the specified position has completed.
15A		303	Home return complete 1	This signal is output when home return of axis 1 has completed.
15B		304	Servo ON output 1	This signal is output while the servo of axis 1 is ON.
16A		305	Positioning complete 2	This signal is output when movement of axis 2 to the specified position has completed.
16B		306	Home return complete 2	This signal is output when home return of axis 2 has completed.
17A		307	Servo ON output 2	This signal is output while the servo of axis 2 is ON.
17B	N		OV input	Connect OV.

* With regard to PNP wiring diagram, please refer to PSEL manual.

Wiring diagram (NPN)*



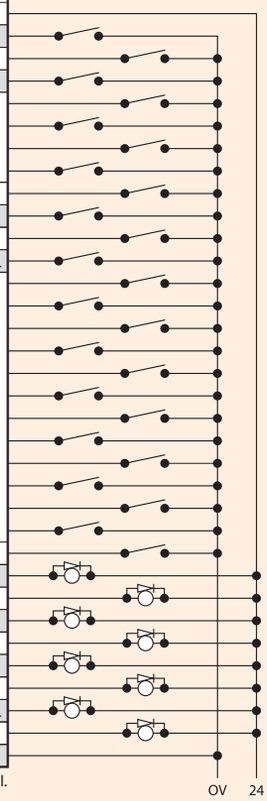
Explanation of I/O Functions

Positioner, Teach Mode

Pin No.	Category	Port No.	Type-switching Positioner Mode	Function
1A	P24		24-V input	Connect 24 V.
1B	Input	016	Axis 1 JOG -	Axis 1 moves in the negative direction while this signal is input.
2A		017	Axis 2 JOG +	Axis 2 moves in the positive direction while this signal is input.
2B		018	Axis 2 JOG -	Axis 2 moves in the negative direction while this signal is input.
3A		019	Inching specification (0.01 mm)	Specify the travel over which to move the actuator by inching. (The travel is the sum of values specified by port Nos. 019 to 022.)
3B		020	Inching specification (0.1 mm)	
4A		021	Inching specification (0.5 mm)	
4B		022	Inching specification (1 mm)	
5A		023	Error reset	This signal resets minor errors. (The power must be reconnected to reset major errors.)
5B		000	Start	The actuator starts moving to the position corresponding to the selected position number.
6A		001	Servo ON	The servo is turned ON/OFF.
6B		002	Pause	The actuator pauses when this signal turns OFF, and resumes the remaining operation when the signal turns ON.
7A		003	Position input 1	Use one of port Nos. 003 to 013 to specify the position number corresponding to the position to move the actuator to, and another to specify the position number under which to input the current position. If port No. 014 for teaching mode specification is ON, the current value is written to the specified position number when port No. 000 for start signal turns ON.
7B		004	Position input 2	
8A		005	Position input 3	
8B		006	Position input 4	
9A		007	Position input 5	
9B		008	Position input 6	
10A		009	Position input 7	
10B		010	Position input 8	
11A		011	Position input 9	
11B		012	Position input 10	
12A		013	Position input 11	
12B		014	Teaching mode specification	
13A		015	Axis 1 JOG +	Axis 1 moves in the positive direction while this signal is input.
13B	Output	300	Alarm	This signal is output when an alarm has occurred. (Contact B)
14A		301	Ready	This signal is output when the controller has started properly and become ready to operate.
14B		302	Positioning complete	This signal is output when movement to the specified position has completed.
15A		303	Home return complete	This signal is output when home return has completed.
15B		304	Servo ON output	This signal is output while the servo is ON.
16A		305	–	–
16B		306	System battery error	This signal is output when the system battery voltage has dropped (to the warning level).
17A		307	–	–
17B	N		OV input	Connect OV.

* With regard to PNP wiring diagram, please refer to PSEL manual.

Wiring diagram (NPN)*

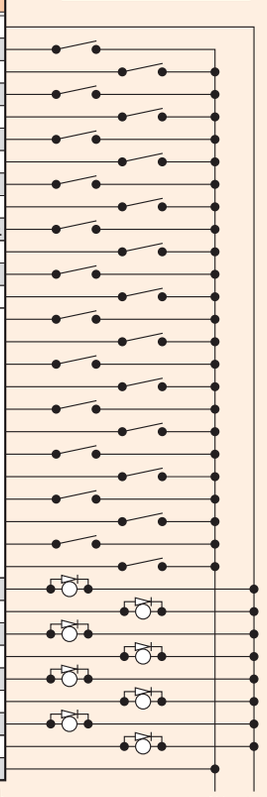


Positioner, DS-S-C1 Compatible Mode

Pin No.	Category	Port No.	Standard Positioner Mode	Function
1A	P24		24-V input	Connect 24 V.
1B	Input	016	Position No. 1000	(Same with port Nos. 004 to 015.)
2A		017	–	–
2B		018	–	–
3A		019	–	–
3B		020	–	–
4A		021	–	–
4B		022	–	–
5A		023	CPU reset	The system is reset and enters the same state achieved after the power has been reconnected.
5B		000	Start	The actuator starts moving to the position corresponding to the selected position number.
6A		001	Hold (pause)	The actuator pauses when this signal turns ON, and resumes the remaining operation when the signal turns OFF.
6B		002	Cancel	The actuator stops when this signal turns ON, and the remaining operation is cancelled.
7A		003	Interpolation setting	In the case of a 2-axis specification, the actuators move via linear interpolation while this signal is ON.
7B		004	Position No. 1	Use one of port Nos. 004 to 016 to specify the position number corresponding to the position to move the actuator to. The value is specified by a BCD code.
8A		005	Position No. 2	
8B		006	Position No. 4	
9A		007	Position No. 8	
9B		008	Position No. 10	
10A		009	Position No. 20	
10B		010	Position No. 40	
11A		011	Position No. 80	
11B		012	Position No. 100	
12A		013	Position No. 200	
12B		014	Position No. 400	
13A		015	Position No. 800	
13B	Output	300	Alarm	This signal is output when an alarm has occurred. (Contact A)
14A		301	Ready	This signal is output when the controller has started properly and become ready to operate.
14B		302	Positioning complete	This signal is output when movement to the specified position has completed.
15A		303	–	–
15B		304	–	–
16A		305	–	–
16B		306	System battery error	This signal is output when the system battery voltage has dropped (to the warning level).
17A		307	–	–
17B	N		OV input	Connect OV.

* With regard to PNP wiring diagram, please refer to PSEL manual.

Wiring diagram (NPN)*



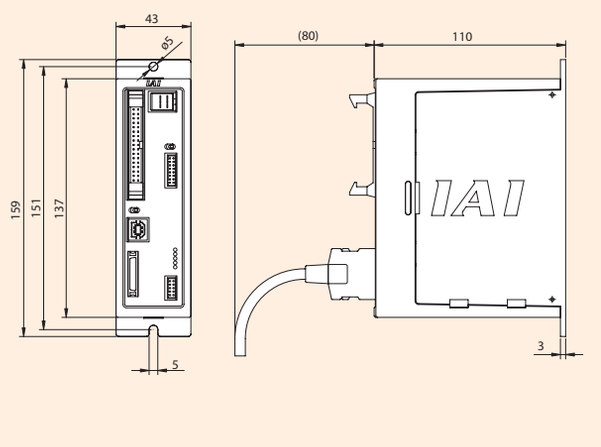
Specification Table

	Item	Specification
Base specifications	Connected actuator	RCP2-series actuator (Note 1)
	Input voltage	24 VDC ±10%
	Power-supply capacity	Max. 5.5 A
	Dielectric strength	500 VDC, 10 MΩ or more
	Withstand voltage	500 VAC, 1 minute
	Rush current	Max. 30 A
	Vibration resistance	XYZ directions: 10 to 57 Hz: (Single amplitude) 0.035 mm (continuous), 0.0 75 mm (intermittent) 58 to 150 Hz: 4.9 m/sec2 (continuous), 9.8 m/sec2 (intermittent)
Control specifications	Number of controlled axes	1/2
	Maximum total output of connected axes	–
	Position detection method	Incremental encoder
	Speed setting	1 mm/sec ~ (The maximum limit varies depending on the actuator.)
	Acceleration setting	0.01 G ~ (The maximum limit varies depending on the actuator.)
	Operation method	Program operation/positioner operation (switchable)
Program	Program language	Super SEL
	Number of programs	64
	Number of program steps	2000
	Number of multi-tasking programs	8
	Number of positioning points	1500
	Data storage device	Flash ROM (An optional system-memory backup battery can be added.)
	Data input method	Teaching pendant or PC software
Communication related	Number of I/O points	24 input points/8 output points (NPN/PNP selectable)
	I/O power supply	24 VDC ±10%, externally supplied
	PIO cable	CB-DS-PIO□□□ (supplied with the controller)
	Serial communication function	RS232C (half-pitch connector)/USB connector
	Field network cable	(To be supported in the future)
	Motor cable	CB-RCP2-MA□□□ (max. 20 m)
	Encoder cable	CB-RCP2-PA□□□-RB (max. 20 m)
General specifications	Protective functions	Motor/driver temperature check, encoder open check, soft limit overtravel, system error, battery error, etc.
	Surrounding air temperature/humidity	0 to 40°C, 10 to 95% (non-condensing)
	Surrounding ambience	Free from corrosive gases or significant dust.
	Protection degree	IP20
	Weight	Approx. 450 g
	External dimensions	43 mm (W) x 159 mm (H) x 110 mm (D)

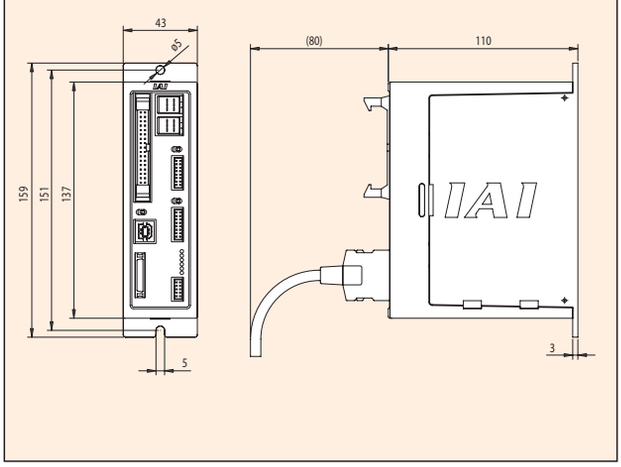
The high-thrust type (RA10C), high-speed type (HS8C/HS8R) and waterproof type (RCP2W-SA16) are not operated.

External Dimensions

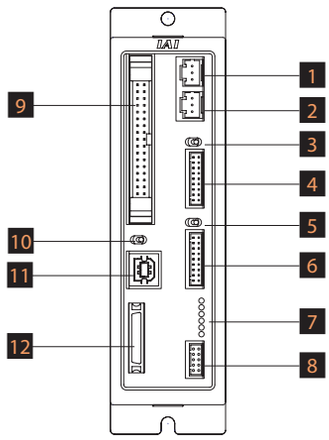
PSEL 1-axis controller

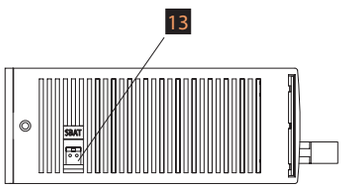


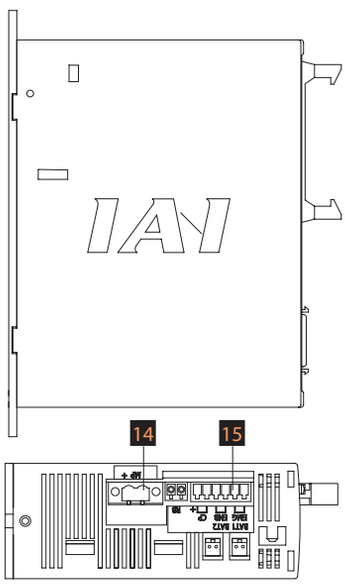
PSEL 2-axis controller



Name of Each part







1 Axis 1 motor connector

Connect the motor cable for actuator axis 1 here.

2 Axis 2 motor connector

Connect the motor cable for actuator axis 2 here.

3 Axis 1 brake switch

This switch is used to release the axis brake. When the switch is set to the left (RLS) position, the brake is forcibly released. When the switch is set to the right (NOM) position, the brake is controlled automatically by the controller.

4 Axis 1 encoder connector

Connect the encoder cable for actuator axis 1 here.

5 Axis 2 brake switch

This switch is used to release the axis brake. When the switch is set to the left (RLS) position, the brake is forcibly released. When the switch is set to the right (NOM) position, the brake is controlled automatically by the controller.

6 Axis 2 encoder connector

Connect the encoder cable for actuator axis 2 here.

7 Status indicator LEDs

These LEDs indicate the operating status of the controller. What is indicated by each LED is explained below:

PWR: The power is currently input to the controller.
RDY: The controller is ready to perform program operation.
ALM: The controller is abnormal.
EMG: An emergency stop has been actuated and the drive source is being cut off.
SV1: The servo of actuator axis 1 is turned ON.
SV2: The servo of actuator axis 2 is turned ON.

8 Panel unit connector

This connector is used to connect the panel unit (optional) for displaying the controller status and error numbers.

9 IO connector

A connector for interface IOs.

If a DIO (24IN/8OUT) interface is used, this connector accepts a 34-pin flat cable connector.

The IO power is also supplied to the controller through this connector (pins 1 and 34).

10 Mode switch

This switch is used to indicate the operation mode of the controller.

The left position indicates the MANU (manual operation) mode, while the right position indicates the AUTO (auto operation) mode. Teaching operation can only be performed in the MANU mode, and operation using external IOs cannot be performed in the MANU mode.

11 USB connector

This connector is used to make USB connection with a PC. When the USB connector is in use, the TP connector cannot be used because communication through the TP connector is cut off.

12 Teaching pendant connector

This half-pitch, IO26-pin connector is used to connect a teaching pendant when the operation mode is MANU. You need a dedicated conversion cable to connect to a conventional D-sub, 25-pin connector.

13 System-memory backup battery connector

This connector is used to connect the battery needed to retain the various data stored in the built-in SRAM of the controller even after the power is cut off. The system-memory backup battery is installed on the exterior of the unit. This battery is not a standard accessory (available as an option).

14 Motor-power input connector

This connector is used to input the motor power and consists of a 2-pin, 2-piece connector by Phoenix Contact.

15 Control-power/system input connector

This connector is used to connect the controller power input, emergency stop switch and enable switch, and consists of a 6-pin, 2-piece connector by Phoenix Contact.

Options

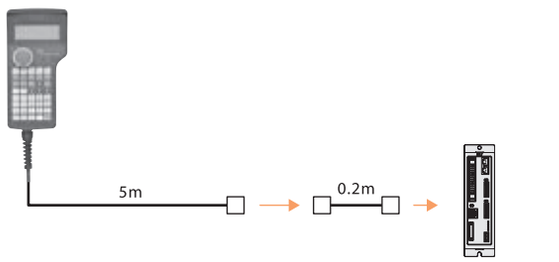
■Teaching Pendant

Features A teaching device offering functions for program/position input, test operation, monitoring, and more.

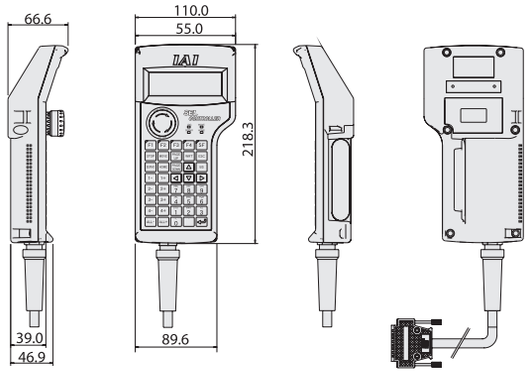
Model/Price

Model	Description
SEL–T–J	Standard type with connector conversion cable
SEL–TD–J	Deadman switch type with connector conversion cable

Configuration



Conversion cable: CB-SEL-SJ002

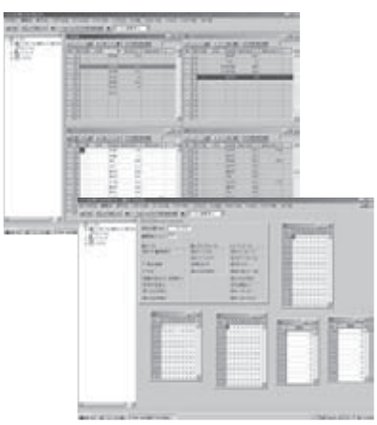


Specification

Item	SEL–T–J	SEL–TD–J
3-position enable switch	Not equipped	Equipped
ANSI/UL standard	Not compliant	Compliant
CE mark	Compliant	
Display	20 characters x 4 lines	
Surrounding air temperature/humidity	0–40°C 10–90%RH (non-condensing)	
Protection structure	IP54	
Weight	Approx. 0.4 kg (excluding cables)	

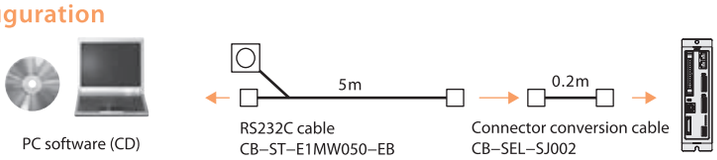
■PC Software (Windows only)

Features A software program that assists the initial startup of your system, offering functions for program/position input, test operation, monitoring, and more. The enhanced debugging functions help reduce the startup time.



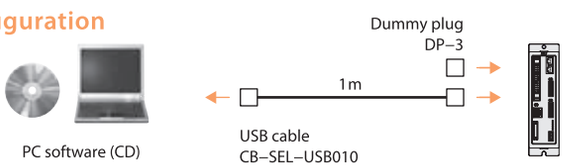
Model **IA–101–X–MW–J** (with RS232C cable + connector conversion cable)

Configuration



Model **IA–101–X–USB** (with USB cable)

Configuration

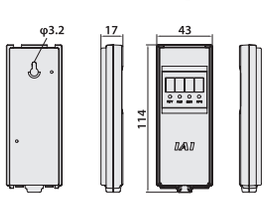


Note
The PSEL controller only supports version 7.0.0.0 or later.

Panel Unit

Features A display for checking controller error codes and the program number of the current program.

Model **PU–1** (cable length: 3 m)



System memory backup battery

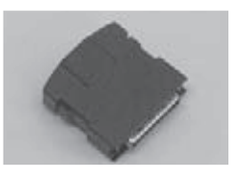
Features This battery is needed when global flags, etc., are used in the program and you want the data to be retained even after the power is turned off.

Model **AB–5–CS** (with case)
AB–5 (battery)

Dummy plug

Features This plug is connected to the teaching pendant to cut off the enable circuit when connecting the PSEL controller to a PC via a USB cable.
(This plug is supplied with the PC software IA-101-X-USB.)

Model **DP–3**



Options

USB cable

Features This cable is used to connect a controller with USB port to a PC.
To connect a controller without USB port (XSEL) to a PC, connect the controller's RS232C cable to a USB cable via a USB conversion adapter and connect the USB cable to the USB port on the PC.
(Refer to the PC software IA-101-X-USBMW.)

Model **CB–SEL–USB010** (cable length: 1 m)

Connector conversion cable

Features This conversion cable is used to connect the D-sub, 25-pin connector for teaching pendant or PC to the teaching connector (half-pitch) on the PSEL controller.

Model **CB–SEL–SJ002** (cable length: 0.2 m)

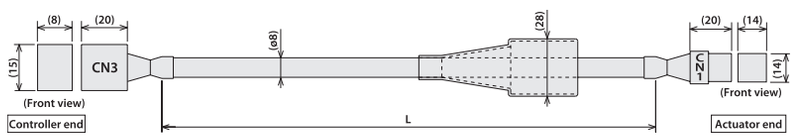
Replacement Parts

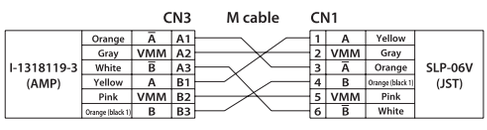
If you must order a replacement cable, etc., after the initial purchase of your product, specify the correct model by referring to the information below.

Motor Cable

Item **CB-RCP2-MA□□□** * The standard motor cable is a robot cable.

* □□□ indicates the cable length (L). A desired length up to 20 m can be specified. Example) 080 = 8 m

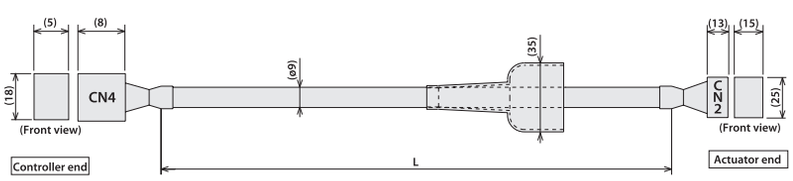


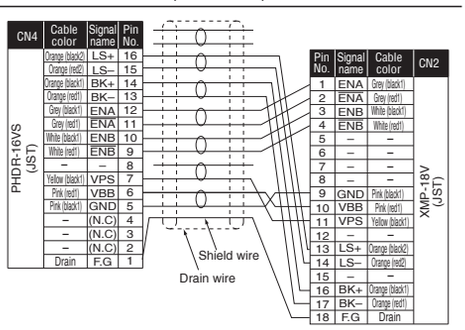


Encoder Cable

Item **CB-RCP2-PB□□□-RB** * The standard encoder cable is a robot cable.

* □□□ indicates the cable length (L). A desired length up to 20 m can be specified. Example) 080 = 8 m

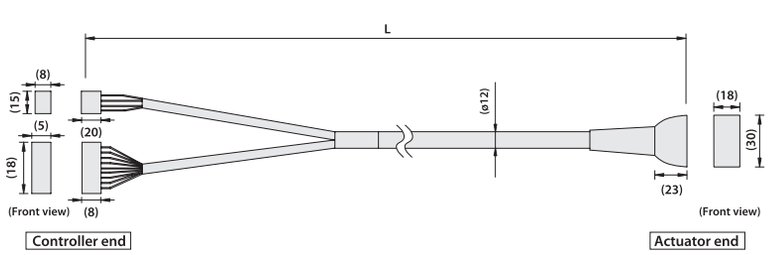


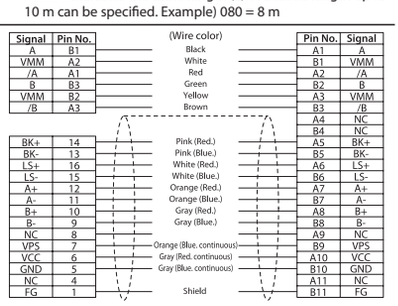


Integrated Motor/Encoder Cable for RCP3

Item **CB-PCS-MPA□□□**

* □□□ indicates the cable length (L). A desired length up to 10 m can be specified. Example) 080 = 8 m

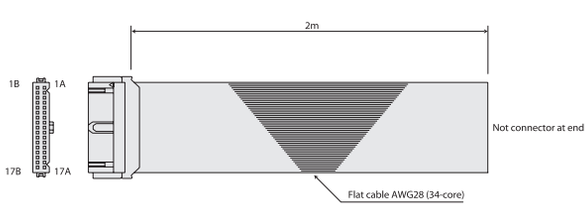




I/O Flat Cable

Item **CB-DS-PIO□□□**

* □□□ indicates the cable length (L). A desired length up to 10 m can be specified. Example) 080 = 8 m



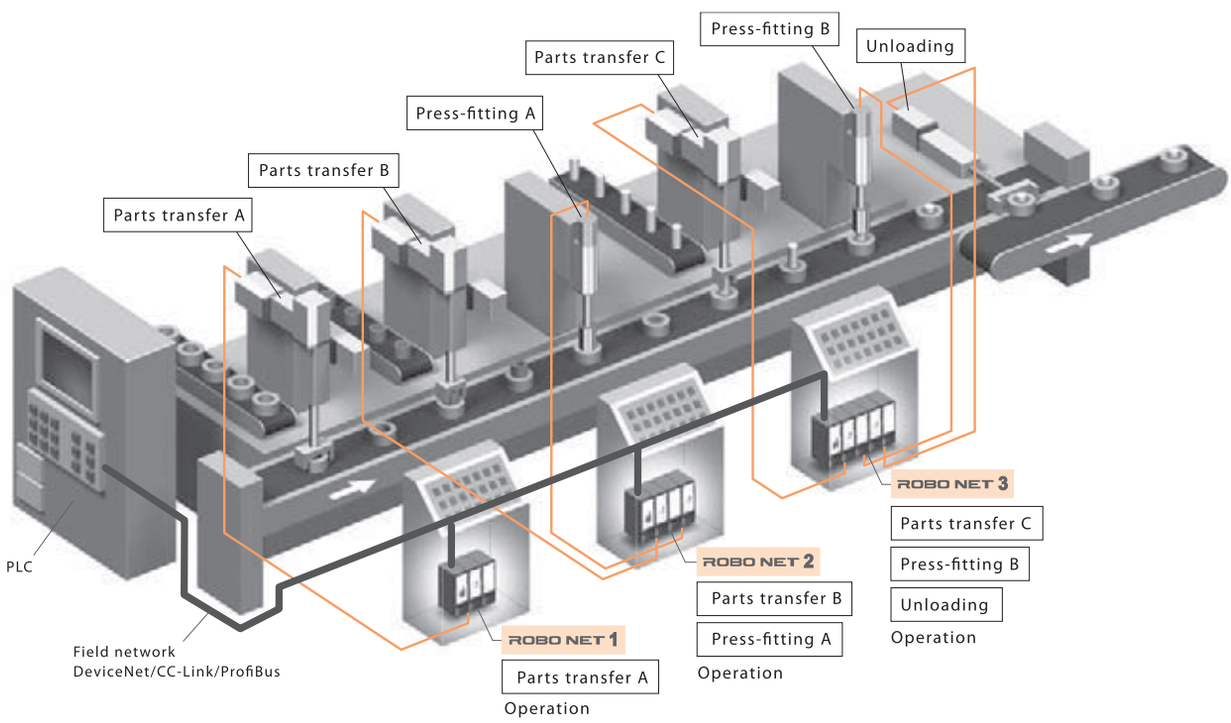
No.	Color	Wire	No.	Color	Wire
1A	Brown 1	Flat cable, pressure-welded	9B	Gray 2	Flat cable, pressure-welded
1B	Red 1		10A	White 2	
2A	Orange 1		10B	Black 2	
2B	Yellow 1		11A	Brown-3	
3A	Green 1		11B	Red 3	
3B	Blue 1		12A	Orange 3	
4A	Purple 1		12B	Yellow 3	
4B	Gray 1		13A	Green 3	
5A	White 1		13B	Blue 3	
5B	Black 1		14A	Purple 3	
6A	Brown-2		14B	Gray 3	
6B	Red 2		15A	White 3	
7A	Orange 2		15B	Black 3	
7B	Yellow 2		16A	Brown-4	
8A	Green 2		16B	Red 4	
8B	Blue 2		17A	Orange 4	
9A	Purple 2		17B	Yellow 4	

ROBONET

Dedicated field network controller

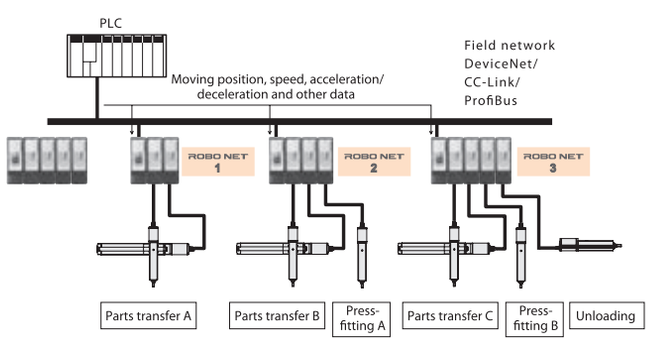
The ROBONET is a new type of controller unit capable of operating ROBO Cylinders at will via a field network. Adopting the wire-saving design, compact size and DIN-rail installation feature, the ROBONET lets you save the hassle of wiring and installation considerably compared to existing controllers.

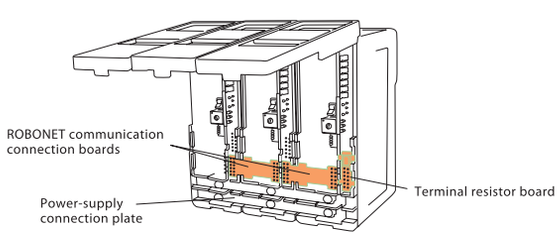
Standard type



1 Wire-saving

Instead of connecting the I/O cables one by one to the PLC terminal, all I/Os can be connected via a field network. This means all you need to complete the wiring is to connect one dedicated cable. Also, units can be linked simply by interconnecting the unit connection boards, which significantly reduces the hassle of controller wiring.





(Linking units inside ROBONET)

2 Operation by Direct Numerical Specification of Moving Position, Speed, Acceleration/Deceleration, Etc.

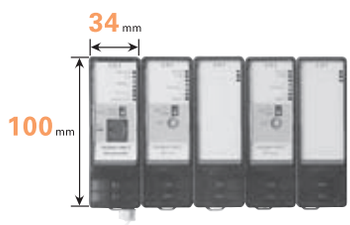
In addition to using the traditional method of entering moving positions and speeds under position numbers and then specifying desired position numbers eternally, you can also send moving positions (coordinates), speeds, accelerations/decelerations, etc., as numeric data to operate the actuator.
This method is effective in situations where the moving position changes for each load or you want to move the load to a desired position.

	ROBONET controller	Standard controller (PCON)
Movement by position specification	○	○
Movement by direct numerical specification	○	△ (Not supported in the PIO mode) (Supported in the serial communication mode.)
Speed/acceleration specification	○	
Current value output	○	

* The ROBONET operates via a field network, while the standard controller operates using PIOs.

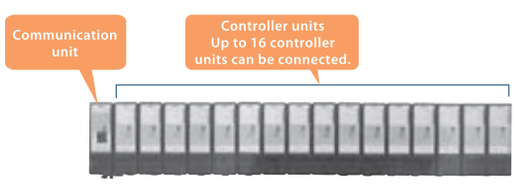
3 Ultra-compact

Each unit adopts an ultra-compact size of just 34 mm (w) x 100 mm (h) x 73 mm (d).
Since there is no base unit and the controllers are linked using connectors, the installation space is minimized even when many units must be connected.



4 Up to 16 Controllers Can Be Operated

Up to 16 controller units can be connected to one communication unit (Gateway R unit). You can connect a desired combination of RPCON units (RCP2 controllers).



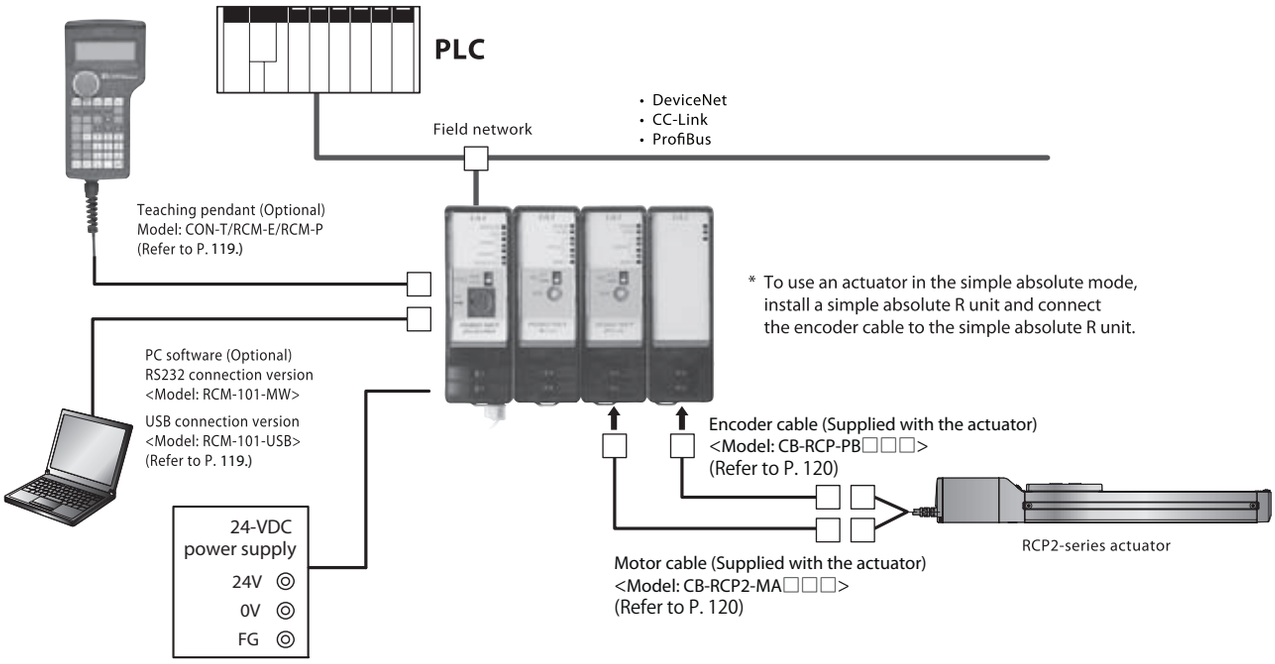
5 Simple Absolute Specification Not Requiring Home Return

The simple absolute R unit lets you operate incremental axes without returning the axes to their home first. If a simple absolute R unit is installed on an RPCON unit (RCP2 controller), the actuator's encoder data will be backed up even after the power is cut off.

6 Installation to DIN Rail

Since the ROBONET adopts a DIN-rail installation feature, each controller can be affixed or removed with a single touch.

System Configuration

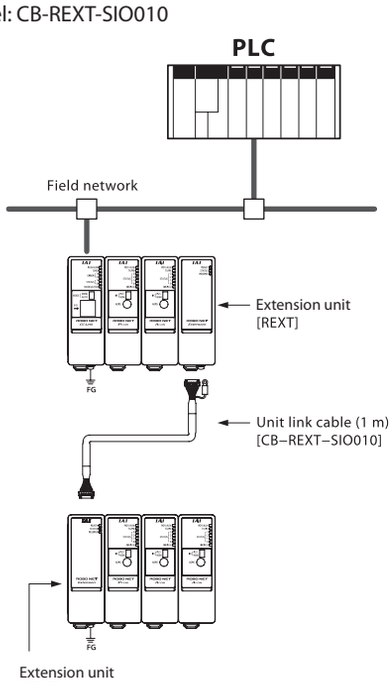


ROBONET Extension unit

The ROBONET extension unit (optional) lets you fold the unit link using a cable when many ROBONET units have been connected and the system has become too wide. You can also connect an SCON or other standalone controller to the network via the ROBONET.

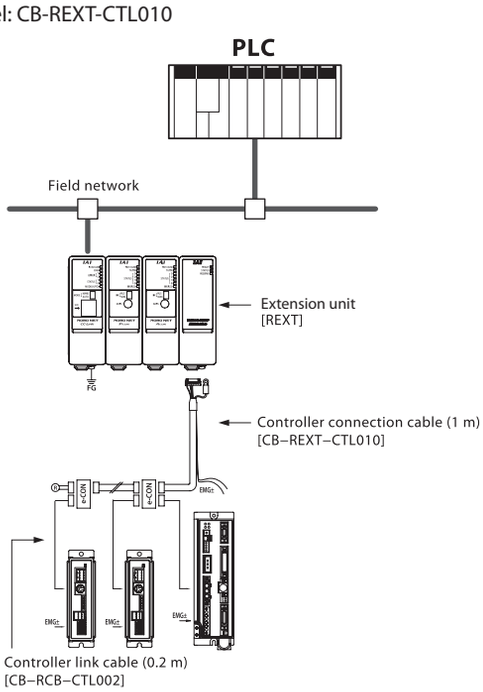
[ROBONET extension set A]
(Unit-folding set)
Model: REXT-SIO
(Items included in the set)

ROBONET extension unit (model: REXT)	x 2
Unit link cable	x 1
Model: CB-REXT-SIO010	



[ROBONET extension set B]
(Controller connection set)
Model: REXT-CTL
(Items included in the set)

ROBONET extension unit (model: REXT)	x 1
Controller connection cable	x 1
Model: CB-REXT-CTL010	



Component Units

You can order the necessary ROBONET components individually and combine them at your will.
If a need arises to add an actuator later, you can extend the system simply by adding an RPCON unit.

Gateway unit | | RPCON unit | Simple absolute R unit | Extension unit

Unit name	Description	Reference page
Gateway unit	A unit for making connection to a field network. One of four types (DeviceNet, CC-Link, ProfiBus and SIO) can be selected. * This unit is required in every ROBONET configuration.	P116 P117
RPCON unit	A controller unit for operating an RCP2 actuator. (One RPCON is required for one actuator axis.) Although the standard specification is incremental, you can also combine a simple absolute R unit to use the RPCON unit as a simple absolute controller.	P116
Simple absolute R unit	A backup battery unit for retaining the encoder data of the actuator after the power is cut off.	P118
Extension unit	A unit for enabling operation via a network by folding the ROBONET link or connecting a standalone controller (SCON/PCON-CF) to the ROBONET.	P118

How to Order/Notes

You can individually order the necessary units comprising your ROBONET system. The delivered units are assembled by the customer. This feature lets you add units to the system or change existing units at will.

<Example of order> The following two axes are operated via Profibus . The models specified below assume that the system is intended as an absolute system.

Actuator 1 Model/ RCP2-SS7C~	Actuator 2 Model/ RCP2-SA5R~	Profibus Gateway unit Model/ RGW-PR	Controller unit for actuator 1 Model/ RPCON-42P	Simple absolute unit Model/ RABU	Controller unit for actuator 2 Model/ RPCON-42P	Simple absolute unit Model/ RABU

■ Operation Manual

The operation manual that comes with each ROBONET product is provided in a CD-ROM, not on paper (as a paper manual). If you with to have a paper operation manual, please specify so in your order. (Both the CD-ROM and paper manuals are free.)
You can also download the operation manual from our website.

■ Gateway-parameter Setting Tool

To connect the ROBONET to a field network, you need the gateway-parameter setting tool to set up the network. This tool can be obtained free of charge through the following methods:
(1) Download the tool from IAI's website.
(2) Purchase each PC software, and the tool will come with the PC software (included in the CD).
To use the gateway-parameter setting tool, you need a cable to connect the PC and controller (PC software cable (model: CB-RCA-SIO050+RCB-CV-MW)). If you don't have any PC software, purchase this cable separately.

■ PC Software, Teaching Pendant

To input position data, etc., to a ROBONET controller unit (RPCON), you need the PC software or teaching teaching pendant.
The ROBONET supports the PC software (model: RCM-101-MW/USB) of Version 6.04 or later. As for teaching pendants, the ROBONET supports the RCM-T of Version 2.06 or later and RCM-E/RCM-P of Version 2.08 or later.
The ROBONET can be used with any version of the CON-T.
If the version of your current PC software or teaching pendant is old, contact your IAI representative.

Explanation of Operation Modes

The ROBONET operates by receiving instructions from a PLC via a field network.
The ROBONET can be operated in any of the three modes specified below. Use a desired mode according to how your system should be operated and controlled.

	Name	Description
1	Positioner mode	In this mode, the actuator is operated by specifying position numbers. The position data, speed, acceleration/deceleration, etc., are input to the position table beforehand. Up to 768 positions can be registered.
2	Simple direct mode	In this mode, only the position data is specified directly by a value, and the remaining items such as speed, acceleration/deceleration, positioning band and current-limiting value during push-motion operation are specified by a position number. Up to 768 positions can be registered.
3	Direct numerical specification mode	In this mode, the actuator is operated by specifying the position data, speed, acceleration/deceleration, positioning band and current-limiting value during push-motion operation directly by values. Since positions are specified numerically, there is no limit to the number of positioning points that can be registered.

List of Functions by Operation Mode

	Positioner mode	Simple direct mode	Direct numerical specification mode
Number of registerable positions	768	768	—
Movement by position number specification	○	—	—
Direct specification of position data	—	○	○
Direct specification of speed and acceleration/deceleration	— (Specified in the position table.)	— (Specified in the position table.)	○
Direct specification of positioning band	— (Specified in the position table.)	— (Specified in the position table.)	○
Push-motion operation	○(Specified in the position table.)	○(Specified in the position table.)	○
Monitoring of completed position number	○	○	
Monitoring of zone output	○	○	○
Monitoring of position zone output	○	○	—
Teaching function	○	—	—
Jogging operation	○	○	○
Inching operation	○	○	○
Monitoring of various status signals (*)	○	○	○
Monitoring of current position (*)	○	○	○
Monitoring of alarm codes (*)	○	○	○
Monitoring of speed/current (*)	—	—	○
Maximum specifiable value of position data	9999.99mm	9999.99mm	9999.99mm
Number of connectable axes	16	16	8

* The various status signals, current position, alarm codes and speed/current can be monitored by accessing each address of the Gateway R unit from the PLC.

Explanation of Component Units (Gateway R Unit)

RPCON Unit: RCP2-series Controller

This controller unit is used to operate an RCP2 actuator in a ROBONET system.

Model RACON–[1]–[2]

* Specify the motor type in [1] in the model name. (Refer to the table below.)
  In [2], specify "ABU" only if you are using the simple absolute unit. (If the simple absolute unit is not used, leave this space blank.)
* The simple absolute unit cannot be used with the RCP2-RA2C, GRS, RTB and RTC.

Model	Applicable actuators
RPCON-20P	RCP2-RA2C / GRS
RPCON-28P-[2]	RCP2-GRM / GR3LS / GR3SS / RTB / RTC
RPCON-28SP-[2]	RCP2-RA3C / RGD3C
RPCON-42P-[2]	RCP2-SA5☐ / SA6☐ / SS7☐ / BA6☐ / BA7☐ / RA4C / RG☐4C /GR3LM / GR3SM RCP2CR-SA5C / SA6C / SS7C RCP2W-RA4C
RPCON-56P-[2]	RCP2-SA7☐ / SS8☐ / RA6C / RG☐6C / RCP2CR-SA7C / SS8C RCP2W-RA6C

* RCP2 actuators of old types are also supported. (Contact IAI for details.)

Specification

Item		Specification
General specifications	Power supply	DC24V ±10%
	Power-supply capacity	Max. 2 A
	Operated actuator	RCP2 series
	Number of positioning points	768
	Backup memory	EEPROM
	Position detection method	Incremental encoder
	Forced release of electromagnetic brake	Brake release switch
	Motor cable	Model CB-RCP2-MA☐☐☐
	Encoder cable	Model CB-RCP2-PB☐☐☐-RB

Item		Specification
Environment conditions	Surrounding air temperature	0~50°C
	Surrounding humidity	95% RH or below (non-condensing)
	Operating ambience	Free from corrosive gases, flammable gas, oil mist or powder dust.
	Protection degree	IP20
Weight		200g
Accessories		ROBONET communication connection board (model: JB-1), power-supply connection plate (model: PP-1)

Gateway RPCON unit of DeviceNet Specification

This communication unit is used to operate the ROBONET via DeviceNet.

Model RGW-DV

Specification

Item			Specification
Power supply			DC24V ±10%
Current consumption			Max. 600 mA
DeviceNet specifications	Communication protocol		Certified DeviceNet 2.0 interface module
			Group 2 only server
			Insulation node of network-power operation type
	Communication specification	Master-slave connection	Bit strobe
			Polling
			Cyclic
	Baud rate		500k/250k/125kbps (switchable using dedicated software)

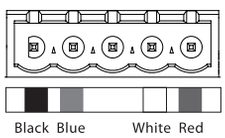
*1 If T-branching communication is to be used, refer to the operation manuals of the master unit and PLC installed in the master unit.

Item		Specification			
DeviceNet specifications	Communication cable length (*)	Baud rate	Maximum network length	Maximum branch length	Total branch length
		500kbps	100m	6m	39m
		250kbps	250m		78m
		125kbps	500m		156m
		Note) When a thick DeviceNet cable is used.			
	Number of occupied nodes	1 node			
Environment conditions	Surrounding air temperature	0~40°C			
	Surrounding humidity	95% RH or below (non-condensing)			
	Operating ambience	Free from corrosive gases, flammable gas, oil mist or powder dust.			
Protection degree		IP20			
Weight		140g			
Accessories		Terminal resistor board (model: TN-1) Network connector/emergency stop connector			

Network Connector

Gateway connector:
MSTBA2.5/5-G-5.08 ABGY AU
(by Phoenix Contact)

Cable-end connector
MSTB2.5/5-ST-5.08 ABGY AU
(by Phoenix Contact)
= Standard accessory



Pin color	Explanation
Black	Power-supply cable -
Blue	Communication data low
-	Shield
White	Communication data high
Red	Power-supply cable +

Applicable Wire for Cable-end Connector

Item	Description
Applicable wire size	Stranded wires: AWG24-12(0.2~2.5mm²)
Stripped length	7mm

Gateway R Unit of ProfiBus Specification

This communication unit is used to operate the ROBONET via ProfiBus.

Model **RGW-PR**

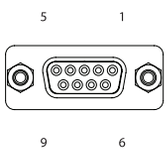
Specification

Item		Specification	
Power supply		DC24V ±10%	
Current consumption		Max. 600 mA	
ProfiBus specifications	Communication protocol	DP slave	
	Baud rate	9.6kbps~12Mbps	
	Communication cable length	9.6kbps	1500m
		500kbps	400m
		1.5Mbps	200m
		3Mbps	200m
		12Mbps	100m

Item		Specification
Environment conditions	Surrounding air temperature	0~40°C
	Surrounding humidity	95% RH or below (non-condensing)
	Operating ambience	Free from corrosive gases, flammable gas, oil mist or powder dust.
Protection degree		IP20
Weight		140g
Accessories		Terminal resistor board (model: TN-1) Network connector/emergency stop connector

Network Connector

Gateway connector:
D-sub, 9-pin connector,
socket end



Pin No.	Signal name	Explanation	Pin No.	Signal name	Explanation
3	B-Line	Communication line B (RS485)	6	+5V	+5-V output (insulated)
4	RTS	Request to send	8	A-Line	Communication line A (RS485)
5	GND	Signal ground (insulated)	Housing	Shield	Cable shield. Connected to the enclosure.

* The mating connector (D-sub, 9-pin connector) is not supplied.
* Pins 1, 2, 7 and 9 are not connected.

Gateway R Unit of SIO Specification

This communication unit is used to operate the ROBONET in serial communication from an XSEL controller (*1) or Modbus communication unit.

Model **RGW-SIO**

Specification

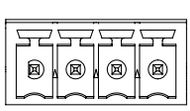
Item		Specification
SIO specifications	Power supply	DC24V ±10%
	Current consumption	Max. 600 mA
	Communication format	Conforming to RS485 (Modbus protocol), 1:1 communication connection
	Communication method	Asynchronous, half-duplex
	Baud rate	Max. 230.4 kbps
	Cable length	100 m or less
	Recommended cable	Twisted paired cable (shielded) x 2

Item		Specification
Environment conditions	Surrounding air temperature	0~40°C
	Surrounding humidity	95% RH or below (non-condensing)
	Operating ambience	Free from corrosive gases, flammable gas, oil mist or powder dust.
	Protection degree	IP20
Weight		140g
Accessories		Terminal resistor board (model: TN-1) Network connector/emergency stop connector

Network Connector

Gateway connector:
MC1.5/4-G-3.5
(by Phoenix Contact)

Cable-end connector
MC1.5/4-ST-3.5
(by Phoenix Contact)
= Standard accessory



Signal name	Explanation	
SA	Communication line A (+)	Conforming to RS485 With a built-in terminal resistor (220Ω)
SB	Communication line A (-)	
SG	Signal ground	
FG	Frame ground. Connected to the enclosure.	

Applicable Wire for Cable-end Connector

Item	Description
Applicable wire size	Stranded wires: AWG28-16 (0.14~1.5mm^2)
Stripped length	7mm

Explanation of Component Units (Simple Absolute R Unit/Extension Unit)

Simple absolute R unit

When this data-backup battery unit is connected to an RPCON (*1), an incremental actuator can be used as an absolute actuator.

*1 One simple absolute R unit is required for one RPCON unit.

Model **RABU** (RPCON)

* To order a simple absolute R unit together with a controller unit (RPCON), specify "-ABU" at the end of the model code of the controller to which the simple absolute R unit will be installed.

Specification

Item		Specification				Item		Specification
General specifications	Power supply	DC24V ±10%				Environment conditions	Surrounding air temperature	0~40°C
	Current consumption	Max. 300 mA					Surrounding humidity	95% RH or below (non-condensing)
	Applicable battery	Ni-MH battery, nickel hydrogen battery					Operating ambience	Free from corrosive gases, flammable gas, oil mist or powder dust.
	Charge time	Approx. 78 hours					Protection degree	IP20
	Battery life	3 years				Weight		330g
	Maximum rotation speed at which absolute data can be backed up (rpm)	800	400	200	100	Accessories		ROBONET communication connection board (model: JB-1), Simple absolute connection board (model: JB-1), power-supply connection plate (model: PP-1)
	Absolute-data backup time (h)	120	240	360	480			

Extension unit

In certain situations, such as when many controllers have been linked to the ROBONET and the system has become too wide to fit the control panel, this unit can be used to fold the controller link by connecting a cable in the middle of the link.
You can also install the extension unit at the end of the ROBONET link and use an external controller cable to operate an SCON or other standalone controller on the network just like the controller units linked to the ROBONET.

Model **REXT** (RPCON)

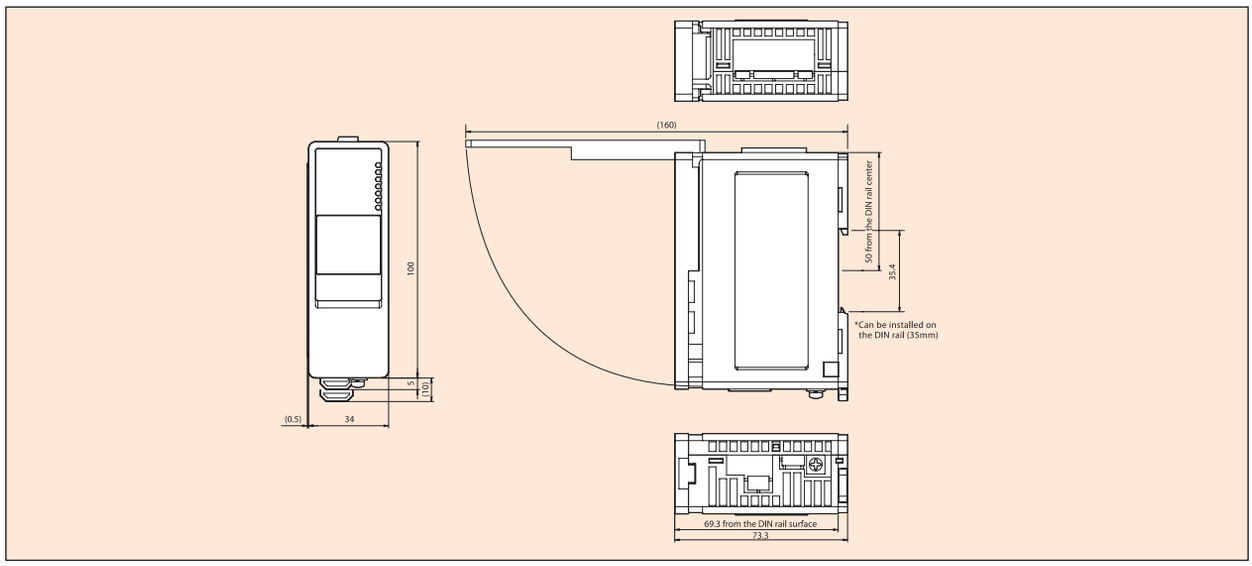
Specification

Item		Specification
General specifications	Power supply	DC24V ±10%
	Current consumption	Max. 100 mA
Environment conditions	Surrounding air temperature	0~40°C
	Surrounding humidity	95% RH or below (non-condensing)
	Operating ambience	Free from corrosive gases, flammable gas, oil mist or powder dust.
	Protection degree	IP20
Weight		140g
Accessories		ROBONET communication connection board (model: JB-1), power-supply connection plate (model: PP-1)

(Note) The cable used when the ROBONET link is folded is different from the one used to connect a standalone controller. For details, refer to the system configuration (ROBONET extension unit) on P. 113.)

External Dimensions

The Gateway R unit, RPCON unit and simple absolute R unit all have the same external dimensions.



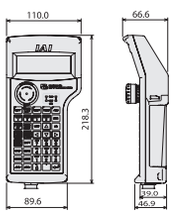
Options

Teaching Pendant

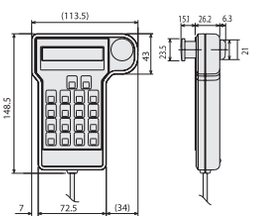
Features A teaching device offering functions for position input, test operation, monitoring, and more.

Model **CON-T-ENG** (Standard type)
RCM-E (Simple teaching pendant)
RCM-P (Data setting unit)

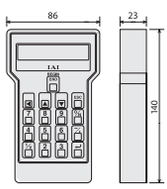
CON-T-ENG



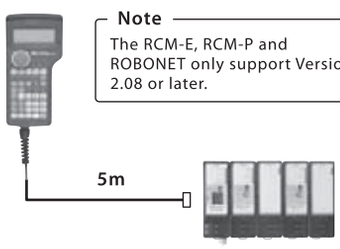
RCM-E



RCM-P



Configuration



Note
The RCM-E, RCM-P and ROBONET only support Version 2.08 or later.

Specification

*no CE mark

Item	CON-T-ENG	RCM-E*	RCM-P*
Data input	○	○	○
Actuator operation	○	○	–
Surrounding air temperature/humidity	Temperature 0 to 40°C, humidity 85% RH or below		
Surrounding ambience	Free from corrosive gases or significant dust.		
Protection degree	IP54	–	–
Weight	Approx. 400 g	Approx. 400 g	Approx. 360 g
Cable length	5 m		
Display	LCD of 20 characters x 4 lines	LCD of 16 characters x 2 lines	LCD of 16 characters x 2 lines

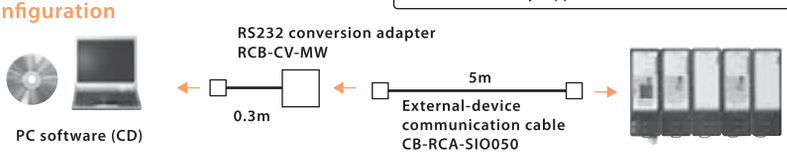
PC Software (Windows only)

Features A software program that assists the initial startup of your system, offering functions for program/position input, test operation, monitoring, and more. The enhanced debugging functions help reduce the startup time.

Model **RCM-101-MW-EU** (with external-device communication cable + RS232) conversion unit)

Note
The ROBONET only supports Version 6.04 or later.

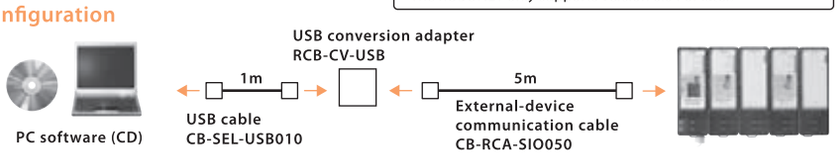
Configuration



Model **RCM-101-USB-EU** (with external-device communication cable + USB conversion adapter + USB cable)

Note
The ROBONET only supports Version 6.04 or later.

Configuration



Replacement Parts

If you must order a replacement cable, etc., after the initial purchase of your product, specify the correct model by referring to the information below.

ROBONET communication connection board (simple absolute connection board)
Model JB-1

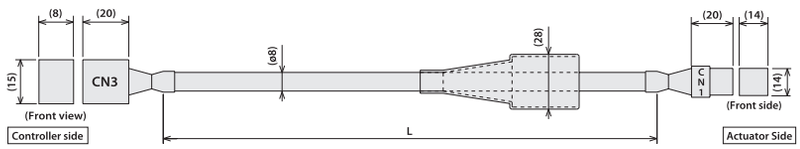
Terminal resistor board
Model TN-1

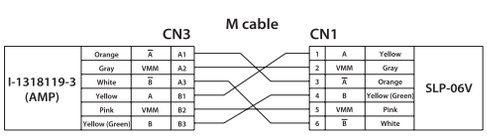
Power-supply connection plate
Model PP-1

Motor Cable for RCP2

Item CB-RCP2-MA□□□

* The standard motor cable is a robot cable. You can select whether or not to use a robot cable.
* □□□ indicates the cable length (L). A desired length up to 20 m can be specified.
Example) 080 = 8 m

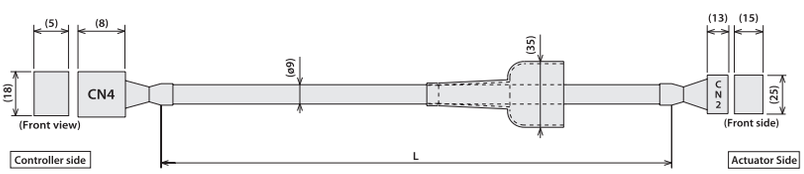


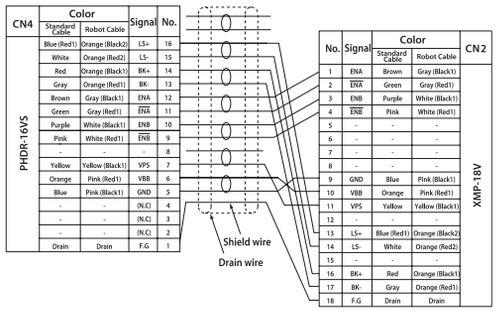


Encoder Cable for RCP2

Item CB-RCP2-PB□□□-RB

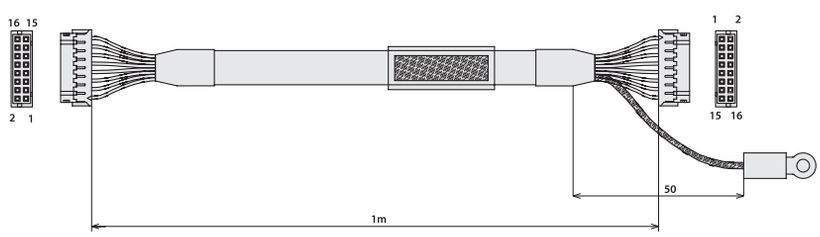
* The standard encoder cable is a normal cable. A robot cable can be specified as an option.
* □□□ indicates the cable length (L). A desired length up to 20 m can be specified.
Example) 080 = 8 m





Unit Link Cable for Extension Unit

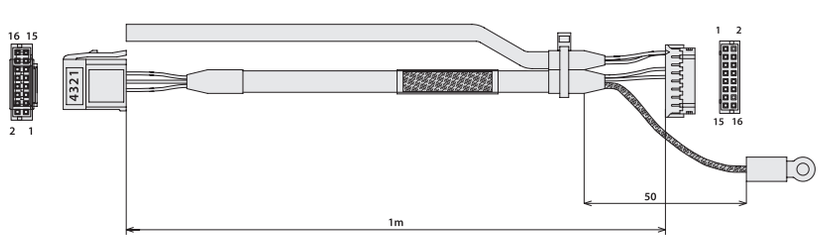
Item CB-REXT-SIO010

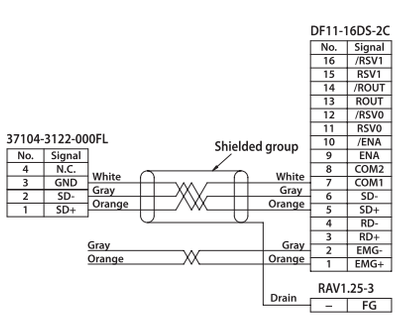


Legend of wire color: Dot color and number of dot(s)/insulator color

Controller Connection Cable for Extension Unit

Item CB-REXT-CTL010





IK-P Series
Extract Cat. No. 1108-E

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IAI Industrieroboter GmbH
Ober der Röth 4
D-65824 Schwalbach / Frankfurt
Germany
Tel.:+49-6196-8895-0
Fax:+49-6196-8895-24
E-Mail: info@IAI-GmbH.de
Internet: http://www.eu.IAI-GmbH.de

IAI America, Inc.
2690 W. 237th Street
Torrance, CA 90505, U.S.A.
Phone: +1-310-891-6015
Fax: +1-310-891-0815

IAI (Shanghai) Co., Ltd.
Shanghai Jiahua B. C. A8404.808
Hongqiao Rd., Shanghai 200030, China
Phone: +86-21-6448-4753
Fax: +86-21-6448-3992

IAI CORPORATION
645-1 Shimizu Hirose
Shizuoka 424-0102, Japan
Phone: +81-543-64-5105
Fax: +81-543-64-5182